DOCUMENT RESUME

ED 244 049 CE 037 075

AUTHOR	Anderson, Collete; Peterson, Louise
TITLE	Linking Basic Skills to Entry-Level Retail Salesperson Tasks. Instructional Resources. Assessments.
INSTITUTION	Utah Technical Coll., Salt Lake City. Salt Lake Skills Center.
SPONS AGENCY	Utah State Office of Education, Salt Lake City.
PUB DATE	83
NOTE	165p.; For related documents, see CE 037 073-074 and CE 038 363-364.
AVAILABLE FROM	Salt Lake Skills Center, 431 South 600 East, Salt Lake City, UT 84102 ($2.50).
PUB TYPE	Reports - Research/Technical (143) -- Guides - Non-Classroom Use (055)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Basic Skills; Diagnostic Tests; Entry Workers; Evaluation Criteria; Evaluation Methods; *Instructional Materials; Job Analysis; Job Skills; Mathematics Materials; Occupational Information; Reading Materials; Retailing; *Sales Workers; Student Evaluation; *Test Format; Test Interpretation; Test Reliability; *Tests; *Test Selection; Test Validity; Two Year Colleges; Vocational Education

ABSTRACT

This project first identified the duties and tasks required of an entry-level retail salesperson, using the DACUM (Developing a Curriculum) occupational analysis process. In this process, a panel of local managers and expert workers determine the essential duties and tasks of their occupation. Next, the panel identified the specific basic skills necessary to accomplish each task. Based on the results of those skills analyses and the use of general review criteria for instructional resources and assessments, lists were formulated of the most relevant basic skills instructional and assessment resources available through commercial publishers and vocational research and curriculum development centers. Recommendations were made for selecting instructional materials and assessment instruments in the areas of listening, writing, reading, speaking, and mathematics skills suited to retail salespersons. A list of the instructional and assessment instruments reviewed makes up the bulk of this document. For each instructional resource, the title, publisher, copyright date, stated objectives, reading level, type of material, and cost are given, along with the opinion of the reviewers. Vocational assessment instruments are described according to their title, skills they appear to assess, item orientation, level of difficulty, number of items, publisher description, cost, copyright dates, type of scoring, type of administration, time required, reporting format, reliability, and validity. Appendixes to the document contain addresses of publishers and research institutes, and task lists of skills used by retail salespersons. (Author/KC)

ED244049

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LINKING BASIC SKILLS TO ENTRY-LEVEL RETAIL SALESPERSON TASKS

• INSTRUCTIONAL RESOURCES
• ASSESSMENTS

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The activity which is the subject of this report was supported in part by the United States Department of Education and the Utah State Office of Education. However, the opinions herein do not necessarily reflect a position or policy of the Utah State Office of Education nor the U. S. Office of Education, and no official endorsement by these offices should be inferred.

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This project took place between the months of September, 1982
and June, 1983. The report was prepared for vocational
administrators, instructors, counselors and curricula designers.
Copies of this report can be obtained from the Utah State Office
of Education, 250 East 500 South, Salt Lake City, Utah, 84111.

Acknowledgements

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AGENCY: Utah State Office of Education

Special thanks are extended to the following individuals and local companies for their help in the completion of this project:

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Contents

		Page
LIST OF FIGURES		1
SECTION I	INTRODUCTION	
	Abstract	5
	Terminology	7
	Background and Rationale	9
	Project Objectives	12
	Project Methodology	13
SECTION II	BRIEF SUMMARY OF RESULTS: OCCUPATIONAL AND BASIC SKILLS ANALYSES	23
SECTION III	BASIC COMMUNICATION AND MATHEMATICS SKILLS USED BY ENTRY-LEVEL RETAIL SALESPERSONS	
	Reading	31
	Writing	37
	Listening	43
	Speaking	49
	Mathematics	55
SECTION IV	REVIEW OF INSTRUCTIONAL RESOURCES	61
	Reading - Vocationally General	67
	Writing - Vocationally Specific & Vocationally General	71
	Listening & Speaking - Vocationally General & Life Skills	83
	Mathematics - Vocationally Specific & Vocationally General	97
SECTION V	REVIEW OF ASSESSMENT RESOURCES	121
	Vocationally Specific	127
	Vocationally General	131
	Life Skills	141
	Classroom Skills	169
SECTION VI	FINAL CONCLUSIONS AND RECOMMENDATIONS	177
BIBLIOGRAPHY AND APPENDICES		185
A	Commercial Publisher List	191
B	Vocational Research & Curriculum Development Center List	195
C	Retail Sales DACUM Chart	201

List of Figures

Figure	Description	Page
1	Retail Sales Analyzed According to Percentage of Basic Communication and Mathematics Skills Required	25
2	Reading Skills - Percentage of each type required	32
3	Writing Skills - Percentage of each type required	38
4	Listening Skills - Percentage of each type required	44
5	Speaking Skills - Percentage of each type required	50
6	Mathematics Skills - Percentage of each type required	56

Section 1

Introduction

Abstract

The basic skills of reading, writing, listening, speaking and mathematics are an integral part of the duties and tasks of many occupations. However, more precise information about which of those basic skills are required in a given occupation is needed. Vocational administrators, curricula developers, assessment and instructional counselors, and instructors require specific basic skills information in order to find and select the most occupationally relevant basic skills instructional materials and assessment instruments. They can then more easily determine entry and exit criteria for vocational training programs. They can also instruct in the basic skills more practically and effectively prior to or during vocational training.

This project first identifies the duties and tasks required of an entry-level retail salesperson using the DACUM (Developing a Curriculum) occupational analysis process. In this process, a panel of local managers and expert workers determine the essential duties and tasks of their occupation. Next, the panel identifies the specific basic skills necessary to accomplish each task.

Finally, based on the results of those skills analyses and the use of general review criteria for instructional resources and assessments, lists were formulated of the most relevant basic skills instructional and assessment resources available. Final conclusions and recommendations end the report.

Terminology

Basic Skills (basic educational skills)	Fundamental reading, writing, listening, speaking and mathematics proficiencies
Basic Communication Skills	Fundamental reading, writing, listening and speaking abilities necessary to send or receive a message
Basic Skills Taxonomy	Categories of a given basic skill
Salesperson (retail trade) (Dictionary of Occupational Titles, p. 2)	Sells merchandise to individuals in store or showroom, utilizing knowledge of products sold: Greets customer on sales floor and ascertains make, type, and quality of merchandise desired. Displays merchandise, suggests selections that meet customer's needs, and emphasizes selling points of article such as quality and utility. Prepares sales slip or sales contract. Receives payment or obtains credit authorization. Places new merchandise on display. May wrap merchandise for customer. May take inventory of stock. May requisition merchandise from stockroom. May visit customer's home by appointment to sell merchandise.
Task	A measurable element of work usually performed by a single worker
Duty	A larger category of work which consists of related tasks
Occupation	The overall category into which particular duties are placed
Entry-level Retail Salesperson*	A person with vocational training in retail sales, but no experience, obtaining his/her first position in the occupation
Occupational Analysis	A determination of the duties specific to a given occupation and the tasks that comprise those duties

* entry-level is assumed throughout the report

Vocationally General	Applicable to any occupation
Vocationally Specific	In this report, applicable to the particular occupation of retail sales
Vocationally Specific basic skills	Fundamental reading, writing, listening, speaking and mathematics abilities required to perform retail sales duties and tasks
Life Skills	Fundamental abilities which enable one to cope with the everyday demands of adult existence
Classroom Skills	Competencies and abilities which enable a student to function satisfactorily in a structured educational setting
Placement Test	Assessment used to determine minimal proficiency for future success in a given learing situation or program
Diagnostic Test	Assessment used to determine the nature of specific weaknesses or deficiencies; yielding measures of the components of sub-parts of some larger body of information or skills
Face Validity	Acceptability of an assessment and/or assessment situation by the examinee or user in regard to the apparent uses to which the assessment will be put
Content Validity	Extent to which the items an assessment contains represent a balanced and adequate sampling of the group of skills and knowledge the assessment is intended to cover
Predictive Validity	Extent to which an assessment accurately indicates future success in the areas in which it is being used as a predictor
Raw Score	First numerical result obtained in scoring a test; a direct, unconverted, uninterpreted measure

Background and Rationale

BACKGROUND

A study published by the National Institute of Vocational Education illustrates the point that there is a need to define occupationally specific basic skill proficiencies.

> It would be most useful to know the level of basic skill attainment of students in different vocational programs so that the gap, if any, between proficiency of students who are preparing for particular occupations and demands placed on workers in those occupations can be identified and closed.[1]

The U.S. Office of Vocational and Adult Education also supports the idea of linking basic skills to vocational education in the following statement published in the 1979 Federal Register: "Basic educational skills are essential to all persons, and vocational education must complement basic skills/remedial programs if persons are to succeed in vocational education programs."[2]

At a recent Utah State Office of Education conference on basic skills in vocational education, secondary and post-secondary administrators voiced the need for vocationally-specific instructional materials and assessments. The keynote speaker, Dr. James Dunn, from the Cornell Institute of Occupational Education, described the national need.

Some research and reference materials have been developed to deal with the problem. The Dictionary of Occupational Titles (DOT), Fourth Edition, provides ratings which indicate the complexity of "worker functions" in every occupation. These ratings were designed to provide information concerning the skills necessary in working with data (including numbers, words, symbols, and concepts), people and things.[3] This system addresses the need for both academic and occupational skills on the job. However, the aforementioned National Institute of Education study expresses the limitations of the DOT ratings. "These ratings permit only indirect inferences about the level of reading, writing, and arithmetic skills required in jobs."[4]

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1 Corman, Louise, Basic Skills Proficiencies of Secondary Vocational Education Students. (Washington D.C.: Vocational Education Study Publication No. 4, U.S. Department of Education, November, 1980)

2 Federal Register (June 13, 1979), p. 33961

3 Dictionary of Occupational Titles, Fourth Edition, 1979

4 Corman, op. cit.

Another step toward linking academic skills to occupational tasks is the Vocational Preparation and Occupations Handbook (VPO)[5]. The primary purpose of the VPO is to integrate various occupational and U.S. Office of Education classification systems. However, the focus of the publication is not entry-level and the GED (General Educational Development) classification system it employs uses broad terms which are difficult to translate into basic skills instruction.

Occupational task analysis is another response to the need for defining tasks performed and the skills needed on the job. Task analyses are, however, oriented mostly toward occupational tasks, not academic skills. In a study funded through the Massachusetts State College, G. Porter Horne notes that, "Most job (task) analyses have not been specifically oriented toward identifying reading, writing, and math skills required for job performance," and "Business and industry also operate a number of basic skills training programs. However, research on these programs failed to discover any cooperation between task analysts and directors of reading, writing, and/or math programs."[6]

RATIONALE

Basic skills such as reading, writing, listening, speaking and mathematics are an integral part of occupational duties and tasks. However, the basic skills portion of vocational training is not usually linked to the technical portion because basic skills instructors lack accurate data about the basic skills required in a given occupation. Vocational counselors, curricula developers, and educational administrators also need more specific information as they make decisions regarding the basic skill requirements of students.

Teaching basic skills in a vocational context relates fundamental academic abilities to an occupation for which a student has an expressed interest. Since students are motivated to learn the job skills, relating the basic skills to them can add meaning and purpose to their basic skills instruction.

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[5] National Occupational Information Coordinating Committee, Vocational Preparations & Occupations, Interim Edition, Vol. 1, Occupational and Educational Code Crosswalk (Ventura County Superintendent of Schools Office, 1979)

[6] G. Porter Horne, Functional Job Literacy: Implications for Instruction. (Boston, Mass., 1979, Massachusetts State College System)

Few materials have been developed to teach vocationally specific basic skills. Therefore, it is important to search for vocationally specific basic skills resources available from commercial publishers and curriculum development/research centers. If there are not enough materials which teach basic skills for entry-level retail salespersons specifically, a search should be conducted for resources which teach them in a vocationally general manner, (i.e., readings, exercises and problems whose context is the world of work.)

Another area of need is that of evaluation. Basic skills pre- and post-assessments are important in determining levels of proficiency for entry into and exit from retail sales training programs. A search for basic skills assessments which are vocationally specific or vocationally general needs to be carried out as well.

Project Objectives

1. Identify entry-level occupational tasks in retail sales.

2. Determine the basic skills (reading, writing, listening, speaking, and mathematics) necessary to accomplish the occupational tasks outlined in Objective One.

3. Identify and reference instructional resources (including texts, media, etc.) specific to each basic skill identified in Objective Two.

4. Identify and reference assessments specific to the basic skills identified in Objective Two; draw conclusions and make final recommendations.

Project Methodology

Methodology Associated with Objective One

OBJECTIVE ONE: Identify entry-level occupational tasks in retail sales.

1. ERIC Search

An ERIC (Educational Resources Information Center) search was conducted to find research linking basic skills to the occupation of retail sales. The following ERIC descriptors were used:

Retail Sales	Sales occupations
Retailing	Sales training
Customer relations	Entry-workers
Occupational information	Job analysis
Post-secondary	Verbal ability
Job skills	Communication skills
Functional literacy	Math skills
Adult basic education	Reading skills
Vocational education	Speaking skills
Vocational training	Listening skills
Competency-based education	Writing skills

Highlights of the ERIC search:

A review of the ERIC literature revealed some related studies. A rather large research project was developed in Prince Albert, Saskatchewan in 1975. The results, published in the Generic Skills Handbook of Occupational Information, appears to have been the first extensive attempt at linking basic skills to occupational tasks.

The California State Department of Education sponsored a 1977 project, Adult Competency Education (ACE) Kit: Basic Skills in Speaking, Math, and Reading for Employment, which includes research in more than 70 occupations.

The Instructional Materials Laboratory at Ohio State University has developed Task/Activity Analyses for many technical occupations which include some basic skills requirements.

A 1980 project, currently being field-tested in vocational and secondary educational institutions nationwide, was undertaken by the Cornell Institute for Occupational Education. This project is entitled Teaching Basic Skills Through Vocational Education.

A 1982 project, Universal Skills Survey developed by Prep, Incorporated and based on the Generic Skills research mentioned previously, was particularly relevant to this study.

2. The DACUM Process

The decision was made to use the DACUM (Developing A Curriculum) method to determine the occupational tasks of an entry-level retail salesperson locally. DACUM is an occupational analysis process developed in the 1960's by the Canadian Department of Regional Economic Expansion and the General Learning Corporation of New York. It requires a panel of expert workers and supervisors in an occupation to define the duties and tasks required by their occupation.

The panel of experts is formulated according to the specialty areas within their occupation. Experts are selected from those specialty areas in regard to the following characteristics:

- Three to five years of full-time experience in the occupation
- Present full-time employment in it
- Good oral communication skills
- Ability to work cooperatively in a team

Over a specified period of time (usualy 1 to 3 days), the duties and tasks of the occupation under consideration are identified. The process is guided by a group facilitator, and results are written down by a recorder. The group members must reach consensus on each task before the facilitator instructs the recorder to record it.

3. Basic Skills Taxonomy Preparation

Basic Skills taxonomies were selected from the ERIC listings of research studies done by other institutions. The taxonomies chosen were from the project entitled Universal Skills Survey, developed by Prep, Inc., 1982. The Prep taxonomies were edited for this project with help from the Skills Center basic skills instructors. The edited versions were printed onto large pieces of poster board and placed on the walls of the room where the DACUM group was to be held.

Methodology Associated with Objective Two

OBJECTIVE TWO: Determine the basic skills (reading, writing, listening, speaking and mathematics) necessary to accomplish the occupational tasks outlined in Objective One.

Basic Skills Analysis

The DACUM group facilitator introduced the basic skills taxonomies which had been printed on poster paper. The five basic skills (reading, writing, listening, speaking and mathematics) were considered by the group one by one. Each separate skill was thoroughly discussed. The facilitator assured herself that the group members understood each basic skill definition.

The group then considered each occupational task they had already defined. The facilitator asked the group members to think about each basic skill carefully in relation to each occupational task. If the panelists agreed that a particular basic skill was needed, the recorder made note of this on a data sheet. The facilitator pressed group members to be specific (i.e., to give titles of reference books they use, to state what kinds of information they write on a work order, etc.)

An additional aspect of the groups was that throughout, counselors and instructors observed and listened. They were allowed to ask questions or comment to the representatives at various times.

Data Analysis

Data from the data sheets were analyzed according to the percentages since percentages seemed to be the most useful unit of measure for the intended audience. The outcome of the analysis was used in formulating some of the review criteria for instructional assessments and resources.

Methodology Associated with Objective Three

OBJECTIVE THREE: Identify and reference instructional resources (including texts, media, etc.) specific to each basic skill identified in Objective Two.

Searching for Instructional Resources

In order to find materials that integrate basic communication and mathematics skills with retail sales, a search was conducted through three sources: commercial publishers, the Educational Resources Information Center (ERIC), and vocational research and curricula development centers.

1. Commercial Publishers:

The 1982 Publishers' Trade List is a roster of the commercial publishers within the United States. One section of the Trade List cites only those publishers that deal in educational books and media. There were approximately six hundred and fifty publishers in this educational category. The information on the list indicated phone numbers and addresses, but not what types of educational materials publishers produced. A form letter was sent to those publishers requesting a catalog if the firm offered instructional materials in retail sales or in the basic skills.

2. Educational Resources Information Center (ERIC):

Besides the ERIC search done at the beginning of the project, a search was done specific to each basic skill. Pertinent listings were ordered from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210.

All of the ERIC material except one resource was research, not intended for classroom use. Titles of this research material are included in the bibliography.

3. Vocational Research and Curriculum Development Centers:

Using the following publications, a list of approximately one hundred names and addresses of research and curriculum development centers was generated.

Basic Skills in Vocational Education, Cornell Institute for Occupational Education, Cornell University, Ithaca, NY.

Everything You Wanted to Know About Resources for the Disadvantaged, Department of Applied Behavioral Science, University of California, Davis.

The Vocational Curriculum Catalogue, Vocational Curriculum Management Center, Building 17, Airdustrial Park, Olympia, Washington 98505.

Vocational Curriculum Resources for Disadvantaged Students, A Guide to Print and Non-Print Instructional Materials, Vol. 1, Maryland Vocational Curriculum Research and Development Center, University of Maryland, College Park, MD 20742.

The same form letter that was sent to commercial publishers was sent to these centers soliciting pertinent instructional materials. (See Appendices A and B for lists of the publishers and centers that responded affirmatively.)

Obtaining Instructional Resources for Review

1. Commercial Publishers:

   A search through the catalogs of publishers that responded to the form letter revealed approximately thirty publishers who appeared to publish vocationally specific basic skills instructional materials or materials that teach the basic skills in a vocationally general context.

   Examination copies were requested from these publishers. The reviews of these resources follow in Section IV.

2. Resource Guides:

   A search through the catalogs of vocational research and curriculum centers revealed ten centers that appeared to have developed vocationally specific instructional materials or materials which teach the basic skills in a vocationally general context. Materials were requested on loan from those centers.

Broadening the Instructional Resources Search

The search for basic skills materials in the areas of listening and speaking netted so few vocationally specific or vocationally general materials that it was decided to widen the search to include a life skills and a classroom skills category. This added more resources to the review list, although there were still few.

Reviewing Instructional Materials

Review criteria were adapted and compiled from two sources: Everything You Wanted to Know About Resources for the Disadvantaged (Draft), Nemko and Dutton, Department of Applied Behavioral Sciences, University of California, Davis, 1982; and The Development of Instructional Materials: Study Guide, Module 8, American Institute for Research; U.S. Office of Education, 1976.

The criteria were:

- Inclusion of targeted basic skills
- Appropriateness for secondary and post-secondary students
- Vocational relevance (context)
- Reading level (determined by Fry Readability Scale * or by publishers' stated reading levels)
- Vocabulary carefully introduced and defined
- Frequent review
- Use of more than one learning modality
- Illustrations appealing, realistic, contemporary
- Inclusion of teacher's guide or instructions, and objectives
- Text well constructed and durable
- Cost
- Avoidance of racial, cultural and sexual stereotypes

Single page descriptions of all instructional materials reviewed according to the criteria follow in Section IV.

* Fry, Edward B., "Fry Readability Scale", Jamestown Publishers, P.O. Box 6743, Providence, RI 02940.

Methodology Associated With Objective Four

OBJECTIVE FOUR: Identify and reference assessments specific to the basic skills identified in Objective Two.

Searching For Basic Skills Assessments

1. ERIC Search:

   An ERIC search was done with the same descriptors as for the instructional materials with the terms, "pre- and post-assessment", "evaluation", "measurement" and "test" added.

   Highlights of the ERIC Search:

   A review of the assessments cited in the ERIC results revealed no vocationally specific assessments which included basic educational skills. However, those which looked relevant at all to retail sales basic skills were ordered. Descriptions of them follow in the assessment review section.

2. Commercial Publishers:

Catalogs which the Skills Center Assessment Center had previously collected were reviewed for assessment possibilities. The Assessment Coordinator had already ordered some evaluations and these were reviewed.

The latest edition of The Eighth Mental Measurements Yearbook, (Vols. I and II), Oscar Krisen Buros, was used as a source for other assessments. Any evaluation instruments appropriate for adults and secondary students which had not already been collected were ordered.

The publication, Tests of Functional Adult Literacy: An Evaluation of Currently Available Instruments, Northwest Regional Laboratory, was also used as a guide in searching for relevant assessments.

3. Vocational Research and Curriculum Development Centers:

The same publications which provided names and addresses of research/curriculum development centers for instructional resources were used. A form letter soliciting pertinent basic skills evaluations was also sent to those centers.

Reviewing Assessment Resources

Subject matter experts in the basic skills reviewed all the assessments which had been collected. In their review, they responded to the following considerations:

The match of basic skills identified by the industry representatives with assessment items
Degree (if any) of vocational orientation of the items
Level of item difficulty

Low	3-6th grade
Moderate	7-9th grade
High	10-12th grade + beyond

The following general criteria were used in reviewing assessments:

- Date developed or published
- Alternate forms
- Scoring methods
- Timed or untimed
- Cost
- Reporting format
- Method of administration
- Reliability and validity information (where available)

Single page reviews of the assessments follow in Section V.

Broadening the Search for Assessment Resources

It became apparent that so few assessments were vocationally specific, that broader categories would need to be considered. Therefore, 'vocationally general' and 'functional life skills' categories were added to the search.

Section II

Brief Summary of Results

Occupational And Basic Skills Analyses

(More detailed data are available in the individual basic communication and mathematics skills sections)

DACUM Occupational Analysis: Retail Sales

A panel of managers and expert workers from the occupation of retail sales determined that the following duties and tasks were essential to an entry-level sales position in any industry. The panel then ranked those duties according to importance. The relative importance of duties is indicated by the order in which they are listed below.

I. DUTY: SATISFY EVERY CUSTOMER

Tasks:

1. Understand the importance of customer service and safety
2. Listen attentively and respond to customer
3. Be courteous
4. Be friendly and smile
5. Deal with customers' complaints courteously
6. Tactfully explain company policies and programs

II. DUTY: POSSESS GOOD COMMUNICATION SKILLS

Tasks:

1. Understand the importance of customer satisfaction
2. Show enthusiasm and interest
3. Be tactful
4. Deal with telephone customers professionally
5. Use good eye contact
6. Work well with all other employees
7. Write legibly
8. Effectively use an intercom and public address system

III. DUTY: DEMONSTRATE PROFESSIONAL CHARACTERISTICS

Tasks:

1. Demonstrate honesty and integrity
2. Demonstrate pride in his/her work
3. Be reliable/dependable
4. Accept responsibility and make good decisions
5. Be productive
6. Be punctual
7. Be well groomed

IV. DUTY: BE RECEPTIVE TO MANAGEMENT

Tasks:

1. Follow company policies
2. Show willingness to work
3. Accept and learn from criticism
4. Follow through/complete duties with minimum supervision
5. Ask questions
6. Make suggestions

V. DUTY: POSSESS MERCHANDISING SKILLS

Tasks:

1. Maintain store appearance and safety (e.g., dust, sweep, mop, etc.)
2. Maintain attractive displays
3. Demonstrate good sales techniques
4. Demonstrate product knowledge
5. Rotate stock correctly
6. Merchandise related items
7. Understand inventory control

VI. DUTY: POSSESS BASIC MARKETING SKILLS

Tasks:

1. Use basic math
2. Use correct money-handling procedures
3. Be familiar with all types of cash registers
4. Have a basic understanding of advertising policies
5. Possess a basic knowledge of bookkeeping
6. Understand basic purchasing and receiving policies
7. Possess a basic understanding of operating costs

Brief Summary of Occupational and Basic Skills Analyses: Retail Sales

After the DACUM occupational analysis, the participants identified the reading, writing, listening, speaking and mathematics skills retail salespersons need in order to perform those occupational duties and tasks. Frequency of use for each type of basic skill used was tabulated. Then, a comparative (percentage) analysis of the basic skills was performed.

PERCENTAGE ANALYSIS OF BASIC SKILLS REQUIRED OF AN ENTRY-LEVEL RETAIL SALESPERSON *

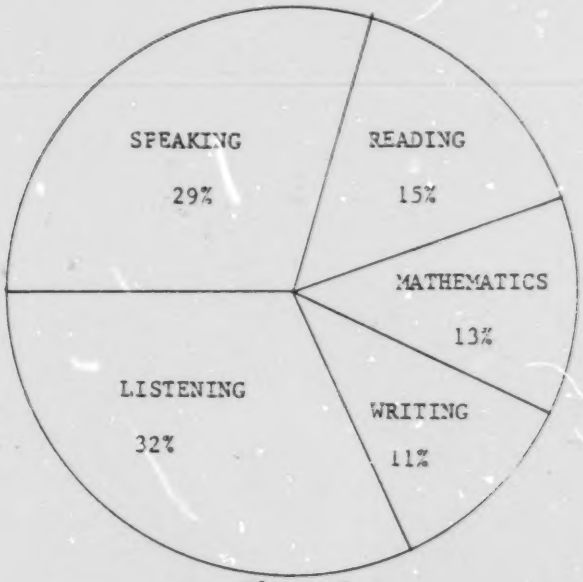


Figure 1

The group participants reported that Listening skills are used most by entry-level retail salespersons. Listening constitutes thirty-two percent of all the basic skills that retail salespersons use. Speaking skills are almost as necessary (29%). Reading skills follow next in importance (15%).

The least frequently used basic skills are Mathematics (13%), and Writing (11%).

* Percentages were rounded off

Narrative Summary of The Most Important Retail Sales Basic Skills

Job-Related Reading Skills

The most frequently used reading skill is READING CORRESPONDENCE, such as letters, memos, notes, etc.

Almost as necessary is the skill of READING FORMS such as requisitions, vouchers, work orders, tax forms, etc.

Job-Related Writing Skills

The skill used most often is WRITING NOTES OR MESSAGES which convey information to another person.

The next most frequently used skill is USING SHORT PHRASES AND/OR NUMBERS.

Job-Related Listening Skills

The most frequently used skills are: LISTENING TO JOB INSTRUCTIONS from supervisors or other workers on what to do or how to do a job or project; and LISTENING CAREFULLY to understand the main intent of the message.

Following next in order are: LISTENING TO CUSTOMER COMPLAINTS AND INSTRUCTIONS to identify dissatisfactions, needs or instructions; and LISTENING ACTIVELY, paraphrasing, asking clarifying questions, etc.

Job-Related Speaking Skills

The skill with the highest percentage of use is PARTICIPATING IN INFORMAL CONVERSATIONS WITH VISITORS OR FELLOW EMPLOYEES which are casual conversations to occupy visitors' time or to maintain good public or employee relations.

The next most frequently used skill is INFORMING by giving information, directions, or opinions.

Job-Related Math Skills

The skill used most often is CALCULATING (using whole numbers, fractions, decimals and percents).

Following next in frequency of use is the skill of MEASURING (weight, distance, thickness, etc.)

Section III

Basic Communication And Mathematics Skills Local Industry Reported Were Essential For Entry-Level Retail Salespersons

Reading

Reading Taxonomy

The reading taxonomy used in this study consists of the following categories: *

1. READ FORMS such as requisitions, vouchers, work orders, tax forms, other governmental forms, etc.

2. READ CORRESPONDENCE such as letters, memos, notes, etc.

3. LOOK UP INFORMATION ON TABLES OR CHARTS outside of books

4. LOOK UP INFORMATION IN REFERENCE BOOKS such as dictionaries, trade manuals, text books, etc.

5. READ TECHNICAL JOURNALS trade magazines, professional journals, trade newspapers, etc.

6. USE CATALOGS Obtain information from trade, supply wholesale catalogs, etc. to determine prices, catalog numbers, etc.

7. USE THE WHITE OR YELLOW PAGES OF THE TELEPHONE BOOK in order to locate telephone numbers or street addresses

8. READ MAPS to locate streets, highways, etc.

9. EXAMINE LEGAL DOCUMENTS

* Adapted from Universal Skills Survey, published by Prep Inc., Trenton, NJ 1982.

According to the group participants, seven of those categories of reading skills are used by entry-level retail salespersons, as percentages in Fig. 2 indicate.

READING SKILLS

ANALYZED ACCORDING TO PERCENTAGES
OF EACH TYPE OF READING REQUIRED *

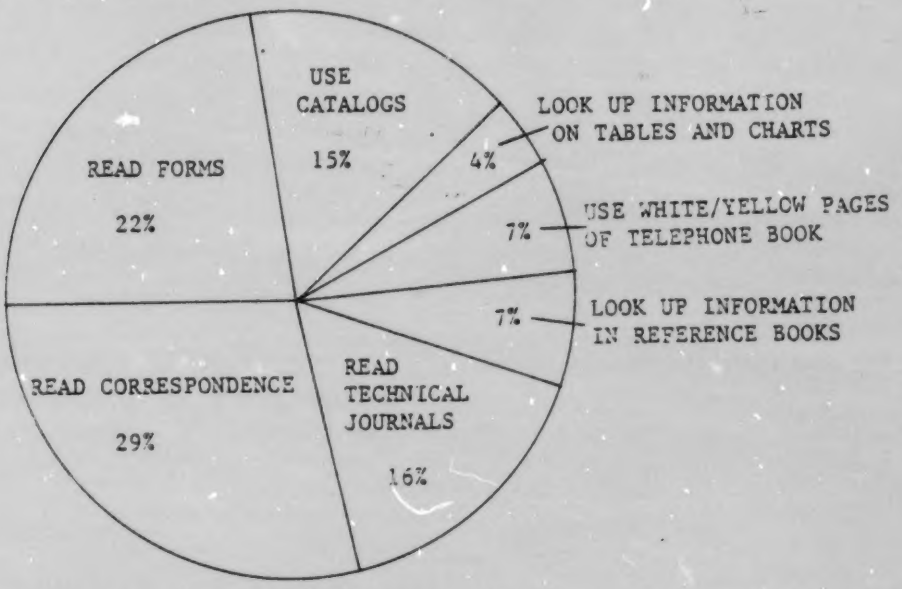


Figure 2

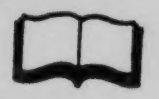
Participants indicated that the reading done most by entry-level retail salespersons is READING CORRESPONDENCE such as letters, memos or notes (29%), and READING FORMS such as requisitions, vouchers, work orders, tax forms, etc., (22%).

The next most frequently used skills involve READING TECHNICAL JOURNALS, trade magazines and professional journals (16%), and USING CATALOGS to obtain information on prices, codes numbers, etc., (15%).

The reading skills used least often are: LOOKING UP INFORMATION IN REFERENCE BOOKS (7%); USING WHITE OR YELLOW PAGES OF TELEPHONE BOOK to locate numbers and addresses of suppliers, distributors, etc., (7%); and LOOKING UP INFORMATION ON TABLES OR CHARTS outside of books (4%).

* Percentages were rounded off

Specific Reading Activities



(This list was also formulated by the industry participants, but does not necessarily comprise a complete one.)

An entry-level retail salesperson applies reading skills to:

1. Look up information on product lines and availability
2. Look up addresses of supplier, etc. in telephone book to find out where to obtain product if stock is low
3. Look up other workers' numbers - (for coverage) in the telephone book
4. Read labels on cleaning products
5. Read labels, date codes, safety hazards, and other information on products
6. Read purchase orders, order guides, invoices
7. Look up catalog prices
8. Read trade magazines to obtain information on new products
9. Read specifications, etc. in trade manuals
10. Look up information in reference books
11. Refer products out for service
12. Refer to advertisements and retractions in newspapers
13. Read competitors' advertisements, etc.
14. Assist customers by looking up information
15. Read correspondence, memos, and newsletters
16. Read memos or other information about stock rotation
17. Read work assignments
18. Read written directions to change policy(ies)
19. Read price lists, codes, catalogs, price tags
20. Read employee handbook, insurance booklet, etc.
21. Read general recommendations or personal suggestions made by workers
22. Read time clock
23. Read vendor directions from display kit, or read display diagrams
24. Read tax charts
25. Read information received from clinics and seminars

Writing

Writing Taxonomy

The writing taxonomy used in this study consists of the following categories: *

1. COMPLETE FORMS USING SHORT PHRASES AND/OR NUMBERS

2. COMPLETE FORMS USING SENTENCES AND/OR PARAGRAPHS

3. WRITE NOTES OR MESSAGES which convey information to another person

4. WRITE BUSINESS LETTERS OR MEMOS in a formal style which might go to an individual, another company or department, or to a governmental agency.

5. WRITE FORMAL REPORTS which describe a situation, an event or an inspection, or make recommendations regarding them.

6. WRITE PERSUASIVE SPEECHES prepare talks which are intended to influence others to adopt or do something.

* Adapted from Universal Skills Survey, published by Prep Inc., Trenton, NJ 1982.

According to the group participants, three categories of writing skills are used by an entry-level worker in these occupations, as percentages in Fig. 3 indicate.

WRITING SKILLS

ANALYZED ACCORDING TO PERCENTAGES
OF EACH TYPE OF WRITING REQUIRED *

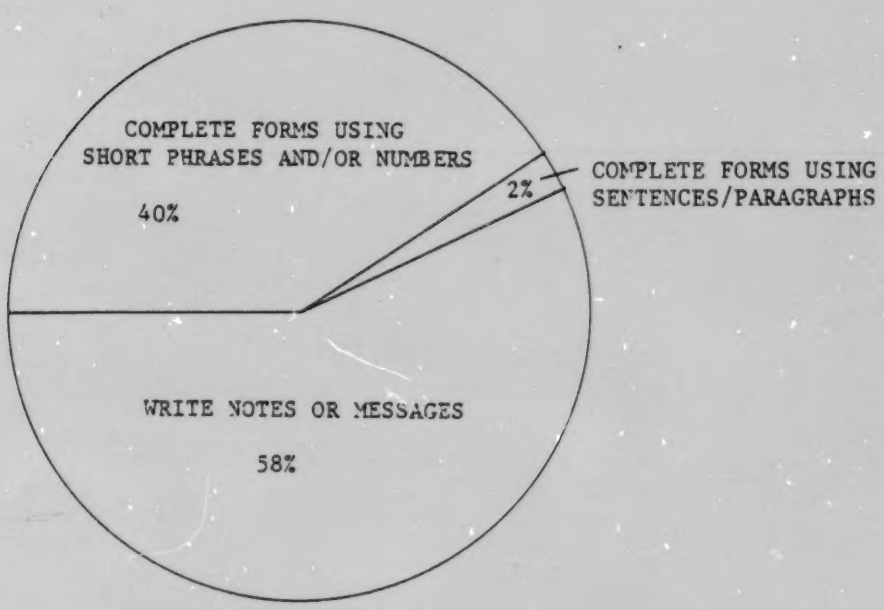


Figure 3

Respondents indicated that the writing skill used most by an entry-level retail salesperson is WRITING NOTES OR MESSAGES which convey information to another person (58%).

The next most frequently used skill is COMPLETING FORMS USING SHORT PHRASES AND/OR NUMBERS, which accounts for 40%. The remaining 2% involve COMPLETING FORMS USING SENTENCES AND/OR PARAGRAPHS.

* Percentages were rounded off

Specific Writing Activities

(This list was also formulated by the industry participants, but does not necessarily comprise a complete one.)

An entry-level retail salesperson applies writing skills to:

1. Fill out employee card
2. Fill out work orders, repair orders, return slips, hand written invoices
3. Fill out layaway or rental forms
4. Fill out product warranty cards - guarantee forms
5. Fill out "rain checks" for customers
6. Write special requests
7. Make notes to oneself to plan what will be said over telephone or intercom system
8. Write down one's own suggestions
9. Write notes to return products, or leave notes as to which product to use first
10. Leave notes for store supervisor re: store appearance/safety
11. Write notes to supervisor about customer complaints
12. Write down customer identification information when accepting checks
13. Write notes or messages for possible recontact with customers
14. Jot down information received over telephone
15. Take down customer names and orders
16. Maintain rapport while writing; don't ignore the customer at this point
17. Print up signs for display (using principles of proportion and content)
18. Write numbers and notes during inventory
19. Complete bookkeeping forms, balance sheets, etc.
20. Complete paperwork legibly
21. Submit written rebuttals to reprimands

Listening

Listening Taxonomy

The listening taxonomy used in this study consists of the following categories: *

1. LISTEN TO JOB INSTRUCTIONS from supervisors or other workers on what to do or how to do a job or project.

2. LISTEN TO FORMAL INSTRUCTIONS Participate in formal, instructional or motivational programs such as lectures, movies or audio-visual presentations.

3. LISTEN TO CUSTOMERS' COMPLAINTS AND INSTRUCTIONS Listen to customers to identify dissatisfactions, needs or instructions for a job or project.

4. LISTEN FOR ABNORMAL NOISES Listen, hear and react to any sounds which might indicate a problem with a machine, etc.

5. LISTEN CAREFULLY to ensure understanding of the main intent or thrust of what the speaker is saying; to identify whether what is said is based on opinions or facts.

6. OBSERVE CAREFULLY the speaker's use of body cues to emphasize what he or she is saying such as the uses of gestures, eye contact, facial expression or body posture.

7. LISTEN ACTIVELY by repeating what another has said in own words (paraphrasing), asking clarifying questions for points not understood, and using other techniques to ensure accurate understanding.

8. LISTEN SYMPATHETICALLY OR EMPATHETICALLY by identifying and dealing with the mood or personality of others to assist understanding and communication.

* Adapted from, Universal Skills Survey, published by Prep Inc., Trenton, NJ 1982

According to the participants in this study, all eight types of listening are used by an entry-level worker in this occupation, as percentages in Fig. 4 indicate.

LISTENING SKILLS

ANALYZED ACCORDING TO PERCENTAGES
OF EACH TYPE OF LISTENING REQUIRED *

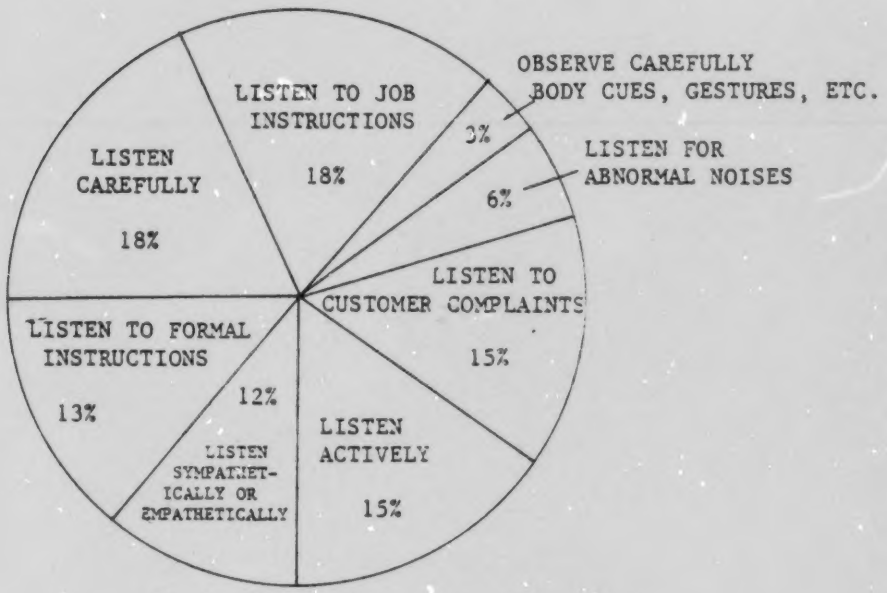


Figure 4

The most frequently used listening skills for entry-level retail salespersons are: LISTENING TO JOB INSTRUCTIONS (from supervisors or other workers), and LISTENING CAREFULLY to understand the main intent of the message, (18% each).

LISTENING TO CUSTOMER COMPLAINTS AND INSTRUCTIONS (to identify dissatisfactions, needs or instructions for a job or project), and LISTENING ACTIVELY (paraphrasing, asking clarifying questions, and other techniques to ensure accurate understanding) each represent fifteen percent of all listening skills used.

Used least are: LISTENING TO FORMAL INSTRUCTIONS (13%), LISTENING SYMPATHETICALLY OR EMPATHETICALLY (12%), LISTENING FOR ABNORMAL NOISES (6%), and OBSERVING CAREFULLY THE SPEAKER'S USE OF BODY LANGUAGE AND CUES (3%).

* Percentages were rounded off

Specific Listening Activities

(This list was also formulated by the industry participants, but does not necessarily comprise a complete one.)

An entry-level retail salesperson applies listening skills to:

1. Listen to instructions from supervisor
2. Listen to instructions from other workers
3. Listen to instructions on how to maintain store appearance and safety (e.g., empty trash, sweep floor, etc.)
4. Listen to manager's suggestions for display
5. Listen to specific instructions on what to sell, the price, the good selling points, etc.
6. Listen to supervisor on what to order, how much, etc.
7. Listen to information about new product lines (supervisors, co-workers, or trade shows)
8. Maintain eye contact while receiving instructions
9. Listen to presentations about stock rotation
10. Listen for abnormal noises when demonstrating products (e.g., glass breaking, high pitch buzzing sounds, etc.)
11. Listen to customers' questions over the telephone
12. Listen to messages and observe body language of customers
13. Be sympathetic to others' problems (e.g., private concerns, death in the family, etc.)
14. Listen to motivational tapes, watch films, review training materials
15. Listen to complaints and ask clarifying questions

Speaking

Speaking Taxonomy

The speaking taxonomy used in this study consists of the following categories: *

1. INFORM by giving information, directions or opinions.

2. PARTICIPATE IN TASK CONVERSATIONS by discussing what is to be done and how it is to be done.

3. PARTICIPATE IN PERSUASIVE CONVERSATIONS to influence others to do something or to adopt new methods.

4. PARTICIPATE IN INFORMAL CONVERSATIONS WITH VISITORS OR FELLOW EMPLOYEES which are casual conversations to occupy visitors' time or to maintain good public or employee relations.

5. PARTICIPATE IN NEGOTIATION CONVERSATIONS employing give-and-take offers and counteroffers.

6. PARTICIPATE IN GROUP MANAGEMENT DISCUSSIONS with or for management to identify new products, new processes or new methods to improve productivity.

7. CONDUCT SUPERVISORY CONVERSATIONS by informing workers of good or bad work performance or attitudes.

8. CONDUCT INTERVIEWING CONVERSATIONS by obtaining information from or about others through question and answer.

9. CONDUCT OR LEAD A MEETING

10. CONDUCT COUNSELING CONVERSATIONS by interviewing a person who has social, personal or financial concerns or who needs advice.

11. RESPOND APPROPRIATELY IN PROBLEM CONVERSATIONS TO A PERSON WHO IS IRRITATED OR DISSATISFIED

12. GIVE EXPLANATORY SPEECHES or talks which convey concepts, ideas, methods, or steps.

13. GIVE IMPROMPTU SPEECHES

14. GIVE PERSUASIVE SPEECHES or talks which are intended to influence others to adopt ideas or do something new.

* Adapted from Universal Skills Survey, published by Prep Inc., Trenton, NJ 1982.

According to the participants in this study, seven of those categories of listening are used by an entry-level worker in this occupation, as percentages in Fig. 5 indicate.

SPEAKING SKILLS

ANALYZED ACCORDING TO PERCENTAGES
OF EACH TYPE OF SPEAKING REQUIRED *

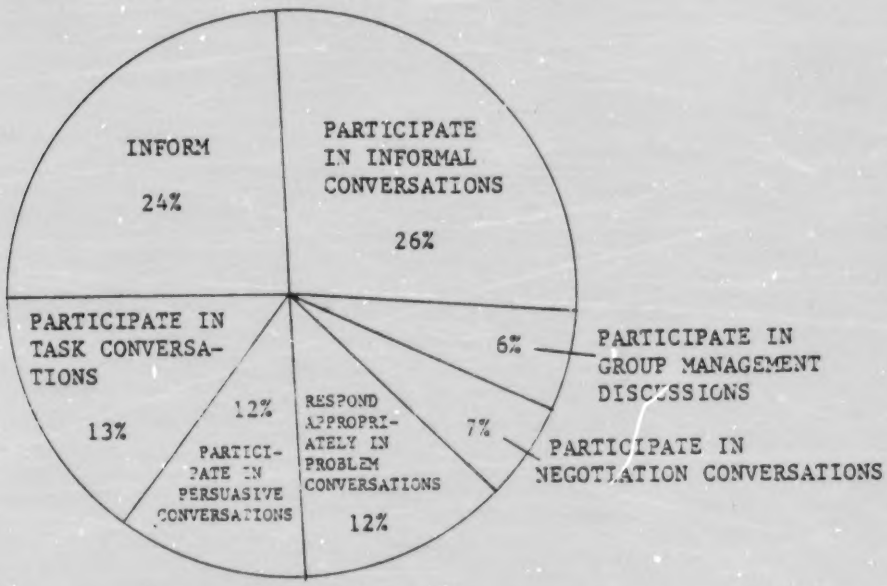


Figure 5

The most frequently used speaking skills for entry-level retail salespersons are: PARTICIPATING IN INFORMAL CONVERSATIONS with visitors or fellow employees to maintain good relations (26%), and INFORMING by giving information, directions, or opinions (24%).

Used next most often are the following speaking skills: PARTICIPATING IN TASK CONVERSATIONS to discuss what is to be done (13%), PARTICIPATING IN PERSUASIVE CONVERSATIONS to influence others (12%), and RESPONDING APPROPRIATELY IN PROBLEM COMVERSATIONS to a person who is irritated or dissatisfied (12%).

Seven percent of the speaking skills involve PARTICIPATING IN NEGOTIATION CONVERSATIONS, and 6% involve PARTICIPATING IN GROUP MANAGEMENT DISCUSSIONS (to identify new products, new processes, or new methods for improvement).

* Percentages were rounded off

Specific Speaking Activities

(This list was formulated by the industry participants, but does not necessarily comprise a complete one.)

An entry-level retail salesperson uses speaking skills to:

1. Negotiate with co-workers by dividing tasks, break times, lunch times, hours for coverage, days off, etc.
2. Ask pertinent questions
3. Communicate possible problems regarding safety to other workers
4. Ask questions concerning new product lines (group management meetings)
5. Report when products are out or low
6. Answer customer questions, and respond to opinions and complaints
7. Persuade customers to buy products
8. Make suggestions to customers (e.g., alternatives if products desired aren't sold there)
9. Recommend products and express professional opinions
10. Negotiate prices (suggested list prices), if appropriate
11. Give directions as to location of products
12. Use enthusiasm/eye contact in persuading customers to buy
13. Show interest in informal conversations - develop rapport with customers
14. Use tact when giving information (don't belittle others, but get the point across)
15. Ask customer for identification when accepting a check - explain policy if required
16. Respond to problems concerning money
17. Explain to customers when product will be restocked, offer rainchecks
18. Explain to customers if product shipments have been delayed

Mathematics

Mathematics Taxonomy

The mathematics taxonomy used in this study consists of the following categories: *

1. CALCULATE using whole numbers, fractions, decimals, percents.

2. DETERMINE rate, proportions, roots of numbers, averages, money/cost, powers of numbers such as squares, cubes.

3. USE A CALCULATOR for basic arithmetic, quadratic problems, scientific notation, geometry, trigonometry formulas.

4. MEASURE weight, distance, volume, precise thickness using U.S. Customary or Metrics.

5. CONVERT MEASUREMENTS FROM ONE SYSTEM TO ANOTHER

6. ESTIMATE AREA, CAPACITY, VOLUME, COST, TIME OR DURATION (to determine how long a job will take); RESOURCES needed to do a job or project (such as material, equipment, labor, rate).

7. SOLVE SIMPLE WORD PROBLEMS

8. USE ALGEBRA TO SOLVE WORD PROBLEMS in situations where a formula must be devised to solve the problems.

9. SOLVE QUADRATIC PROBLEMS using quadratic equations.

10. USE SCIENTIFIC NOTATION

11. USE GEOMETRY dealing with points, lines, planes, and solids and which requires a knowledge of theorems or propositions, hyperbolic or elliptic geometry.

12. USE BASIC OR ADVANCED STATISTICS to caluclate means, modes, ranges, standard deviations, probabilities, factor analysis, etc.

13. USE TRIGONOMETRIC FORMULAS to find unknown angles or lengths of sides of triangles.

14. READ ASSEMBLY DRAWINGS, BAR AND LINE GRAPHS, SCHEMATICS, etc.

15. DRAW common angles, figures, line and bar graphs, assembly drawings, schematics, etc.

16. USE CALCULUS TO DEAL WITH INTEGRALS

* Adapted from Universal Skills Survey, published by Prep Inc., Trenton, NJ 1982.

55

According to the participants in this study, five types of mathematics skills are used by an entry-level worker in this occupation, as percentages in Fig. 6 indicate.

MATHEMATICS SKILLS

ANALYZED ACCCORDING TO PERCENTAGES
OF EACH TYPE OF MATHEMATICS REQUIRED *

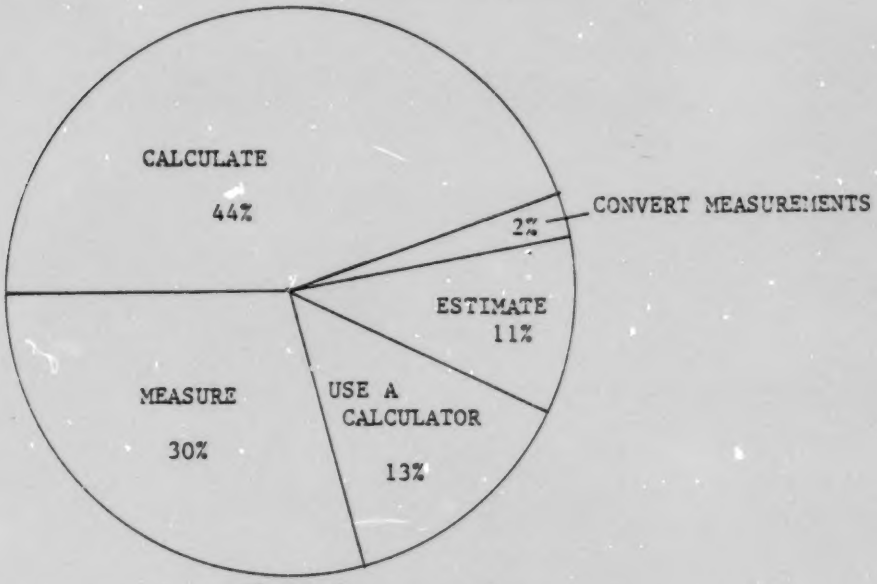


Figure 6

Forty-four percent of the math skills used by entry-level retail salespersons involve CALCULATING (using whole numbers, fractions, decimals and percents). Thirty percent of the math skills entail MEASURING (weight, distance, thickness, etc.).

USING A CALCULATOR (13%) is the next most frequently used skill. Eleven percent of the math skills are ESTIMATING (cost, area or capacity) to determine how long a job will take, etc. The remaining 2% involve CONVERTING MEASUREMENTS FROM ONE SYSTEM TO ANOTHER.

* Percentages were rounded off

Specific Mathematics Activities

(This list was also formulated by the industry participants, but does not necessarily comprise a complete one.)

An entry level retail salesperson applies mathematics skills to:

1. Count inventory
2. Count out money
3. Counting cases (e.g., 10 tapes per box) - determine price per piece
4. Calculate damage, discounts, sale prices
5. Calculate with accuracy/or count accurately
6. Calculate cents-off coupons and other offers
7 Measure weights and volume
8. Use honest measures of weight
9. Use calculator when computers and cash registers are down
10. Use metric tools and conversions
11. Measure for customers (e.g., yards of fabric, etc.)
12. Handle price quotes on measurements (e.g., "How much will 4 yds be?")
13. Estimate materials needed by customers (e.g., paint needed for 8' x 12' room, etc.)
14. Estimate area of store and time needed for possible clean-up
15. Figure mark downs, estimates
16. Figure the amount of tax on purchases
17. Measure mixing solutions for cleaning
18. Change prices on displays
19. Use basic fractions (e.g., 1/2 lb. of candy @ .89 per lb.)
20. Use basic bookkeeping to track money, debits, credits, profit, etc.
21. Detail checking

Section IV
Review of Instructional Resources

Vocationally Specific, Vocationally General or Life Skills
Basic Skills Instructional Resources

TABLE OF CONTENTS

Reading - Vocationally General Resources (pp. 67 to 68)

DO YOU READ ME?
YOU AND YOUR WORK

Writing - Vocationally Specific Resources (pp. 71 to 72)

COMMUNICATIONS: DISTRIBUTIVE EDUCATION (also listening and speaking practice)
SKILLS ORIENTATION SERIES: WRITING UP CHARGE PURCHASES

Writing - Vocationally General Resources (pp. 75 to 79)

ADULT WRITING AND READING EXPERIENCES (also reading, listening, and speaking practice)
APPLIED PENMANSHIP
COORDINATED VOCATIONAL EDUCATION AND TRAINING (also reading practice)
IMPROVE YOUR WRITING FOR JOB SUCCESS
WRITING FOR THE WORLD OF WORK

Listening & Speaking - Vocationally General Resources (pp. 83 to 88)

COMMUNICATING AT WORK (also writing practice)
EFFECTIVE LISTENING: KEY TO YOUR SUCCESS
EFFECTIVE LISTENING: DEVELOPING YOUR EAR-Q (also reading practice)
SKILLS ORIENTATION SERIES: TELEPHONE PROCEDURES (also writing practice)
THE BUSINESS OF ORAL COMMUNICATION: FUNDAMENTALS
VOCATIONAL ENGLISH (also writing practice)

Listening & Speaking - Life Skills Resources (pp. 91 to 93)

COMMUNICATIONS IN MARKETING (also writing practice)
GENERAL MERCHANDISE RETAILING (also math practice)
SKILLS ORIENTATION SERIES: HANDLING CUSTOMER COMPLAINTS

Mathematics - Vocationally Specific Resources (pp. 97 to 103)

APPLIED ARITHMETIC FOR DISTRIBUTION
DYNAMIC RETAILING (also reading practice)
MATHEMATICS CURRICULUM: DISTRIBUTIVE EDUCATION
MATHEMATICS IN MARKETING
RETAILING PRINCIPLES AND PRACTICE (also listening and speaking practice)
RETAIL SELLING
THE WORLD OF RETAILING

Mathematics - Vocationally General Resources (pp. 107 to 118)

BASIC MATHEMATICS FOR THE VOCATIONAL STUDENT
COORDINATED VOCATIONAL EDUCATION AND TRAINING: MATH
MATH
MATH APPLIED TO CAREER HIGHLIGHTS
MATHEMATICS AT WORK: FRACTIONS
MATHEMATICS FOR TECHNICAL AND VOCATIONAL STUDENTS
MATHEMATICS FOR THE TRADES: A PROGRAMMED APPROACH
PROFICIENCY REVIEW TAPES, UNIT D, APPLICATIONS INVOLVING MONEY
VOCATIONAL AND TECHNICAL MATH IN ACTION (text)
VOCATIONAL AND TECHNICAL MATH IN ACTION (transparencies)
WORKING WITH MATH

Review of Instructional Resources

INTRODUCTION

Communication skills are interwoven and interdependent. It is sometimes difficult to classify instructional materials into only one category, (e.g., it is hard to say if a text is a reading or writing text when both skills are required of the student). In order to classify each text in this section according to a particular basic skill, it was necessary to consider the primary teaching objective of each text and not the skills required by the student to reach that teaching objective.

Reading grade level is not included in the reviews of some math materials because not all math texts include word problems from which a level can be determined.

READING
VOCATIONALLY GENERAL RESOURCES

Reading - Vocationally General Resource

TEXT: Do You Read Me?
West Virginia Curriculum Lab
Charleston, WV
1981

STATED OBJECTIVES	No
READING LEVEL	Not reported
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Drawings
TEACHERS' GUIDE	Yes
CONSTRUCTION	Paperback
COST	$10.00
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

General vocational.

Reading - Vocationally General Resource

TEXT: You and Your Work
Alpers and Afrow (1978)
Allyn & Bacon, Inc.
Boston, MA

STATED OBJECTIVES	No
READING LEVEL	8.5
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Black and white photographs
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback
COST	$5.25
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

WRITING
VOCATIONALLY SPECIFIC RESOURCES

Writing - Vocationally Specific Resources

TEXT: Communications: Distributive Education,
Instructional Materials Laboratory
10 Industrial Education Building
University of Missouri - Columbia
Columbia, MO 65211

STATED OBJECTIVES	Yes - Develop skills in sending and receiving oral and written communications
READING LEVEL	11th grade
FREQUENT REVIEW	Pre- Post Assessments
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	Yes - transparency masters
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	None
TEACHERS' GUIDE	(Teachers' Reference Sheet) + Keys
CONSTRUCTION	Loose papers
COST	Instructor $4.40 Student $2.20
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Not applicable

COMMENTS:

One of Marketing and Distributive Education Series

Writing - Vocationally Specific Resource

TEXT: Skills Orientation Series: Writing Up Charge Purchases
Singer Career Systems
80 Commerce Drive
Rochester, NY 14623

STATED OBJECTIVES	Yes Fill out a sample form correctly, total a sale, use a sales tax chart to determine tax charge, determine total cost of purchase.
READING LEVEL	Not applicable
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	Yes
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	Instructor Lesson Plan
CONSTRUCTION	Cassette tape + film strip
COST	$36.50
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Student activity sheets provided.

WRITING
VOCATIONALLY GENERAL RESOURCES

Writing - Vocational-General Resource

TEXT: Adult Writing and Reading Experiences (AWARE I)
Series F (On the Job)
Morris & Birsner
EDL/McGraw Hill
New York, NY 10020

STATED OBJECTIVES	Yes
READING LEVEL	2 - 3 grade
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes (vocabulary not read by student without guidance until final exercise)
USES MORE THAN ONE LEARNING MODALITY	Reading, writing, listening, speaking
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes (Examples of forms)
TEACHERS' GUIDE	Yes
CONSTRUCTION	Paperback plus audio-cassette
COST	Not reported
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Student records and evaluates own progress.

Writing - Vocationally General Resource

TEXT: Applied Penmanship
Ferguson and Lyon (1976)
South-Western Publishing Company

STATED OBJECTIVES	No
READING LEVEL	14th grade
FREQUENT REVIEW	Post-tests
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not applicable
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback
COST	$2.85
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Although the reading level is high, there isn't much actual reading. Includes writing numbers on ledger sheets, taking messages, writing letters, forms, orders, checks, and labels.

Writing - Vocationally General Resource

TEXT: Coordinated Vocational Education and Training
(Vocationally Related English)
Spann, (1972)
State Department of Vocational and Technical Education
Stillwater, OK

STATED OBJECTIVES	Yes
READING LEVEL	3rd grade
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	Reading, writing
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	No
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback
COST	Available on loan
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Includes parts of speech, punctuation, application forms, safety rules, job interviews, and following directions. Poor print quality.

Writing - Vocationally General Resource

TEXT: Improve Your Writing for Job Success
Peterson Handwriting Company (1978)
2215 Commerce Street
Dallas, TX 75201

STATED OBJECTIVES	Not reported
READING LEVEL	6th grade
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback
COST	$3.25
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

This is a penmanship book that includes forms, only one of which is vocationally related (an employment application).

Writing - Vocationally General Resource

TEXT: Writing for the World of Work
Ellen Kaplan (1982)
Educational Design, Inc.
47 W. 13th Street
New York, NY 10011

STATED OBJECTIVES	Not reported
READING LEVEL	4th grade
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback
COST	$3.95
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Includes writing used to get a job, start a job, and for ordering, shipping and receiving.

LISTENING & SPEAKING
VOCATIONALLY GENERAL RESOURCES

Listening & Speaking - Vocationally General Resource

TEXT: Communicating at Work
Williams and Eggland (1979)
South-Western Publishing Company

STATED OBJECTIVES	Yes
READING LEVEL	8th grade
FREQUENT REVIEW	Yes
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	Writing, Listening, Speaking
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Many, in color
TEACHERS' GUIDE	Yes
CONSTRUCTION	Paperback student manual plus audio-cassette
COST	$5.58
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Aimed at teaching communication competencies (oral and written) required on the job, especially by entry-level workers. Chapter 4, "Communicating with Customers" could be useful to a retail salesperson.

Listening & Speaking - Vocationally General Resource

TEXT: Effective Listening: Key to Your Success
Stell, Barker and Watson (1983)
Addison-Wesley Publishing Company
Menlo Park, CA

STATED OBJECTIVES	Pre- and Post-Tests
READING LEVEL	11th grade
FREQUENT REVIEW	Some review
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	New words highlighted
USES MORE THAN ONE LEARNING MODALITY	To be used with videotape program
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	None in text
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback, 8 1/2" x 11"
COST	Not reported
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Covers identification of personal listening strengths and weaknesses, dealing with distractions and emotions, note taking, message evaluation and response, etc.

Listening & Speaking - Vocationally General Resource

TEXT: Effective Listening: Developing Your Ear-Q
Communication Development, Inc.
25 Robb Farm Road
St. Paul, Minnesota 55110

STATED OBJECTIVES	Yes
READING LEVEL	Not reported
FREQUENT REVIEW	Yes
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not reported
USES MORE THAN ONE LEARNING MODALITY	Audio visual, Reading
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	Facilitator Manual
CONSTRUCTION	Paperback study guide plus video tape
COST	Complete Set $2,450.00 Mini Set 895.00
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

A set of seven videotapes - a comprehensive listening series; 3 audio tapes with eleven supplemental listening exercises; study guidebook for use with videotapes.

Cost of individual items:

Single video tapes	$400.00
3 audio tapes	95.00
Facilitator's Manual	19.95
Participant's Workbook	15.00

Listening and Speaking - Vocationally General Resource

TEXT: Skills Orientation Series: Telephone Procedures
Singer Career Systems
80 Commerce Drive
Rochester, NY 14623

STATED OBJECTIVES	Yes
READING LEVEL	Not applicable
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	Yes - pertinent writing activities introduced
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	Instructor Lesson Plan
CONSTRUCTION	Cassette tape + film strip
COST	$36.50
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Student activity sheets provide supplementary activities to teach good business procedures for answering the telephone.

Listening & Speaking - Vocationally General Resource

TEXT: The Business of Oral Communication: Fundamentals
(Module 1) Gwyn, Gwyn and Sander
South-Western Publishing Company
Cincinnati, OH 1980

STATED OBJECTIVES	No
READING LEVEL	5th grade
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	Listening, Speaking
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback study guide plus audio-cassettes
COST	Study Guide $ 2.43 Audio Cassettes $340.00
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Although not truly vocational, there are two sections on conversation at work. Unit 3 is Listening, and includes non-verbal signs.

Listening and Speaking - Vocationally General Resource

TEXT: Vocational English
Globe Book Company, Inc.
New York, NY
1975

STATED OBJECTIVES	Yes
READING LEVEL	7th - 8th grade
FREQUENT REVIEW	Unit tests
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	Also writing
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Drawings
TEACHERS' GUIDE	Yes
CONSTRUCTION	Paperback
COST	$4.00
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Includes: Using a Dictionary, Communication, Expressing Yourself, Getting Along with People, Vocabulary, Writing Reports and Letters.

LISTENING & SPEAKING
LIFE SKILLS INSTRUCTIONAL RESOURCES

Listening and Speaking - Life Skills Resource

TEXT: Communications In Marketing, Second Edition, 1978
McGraw Hill Book Co.
P.O. Box 402
Hightstown, NJ 08520

STATED OBJECTIVES	Student goals stated at beginning of each chapter
READING LEVEL	10
FREQUENT REVIEW	Last chapter is a summary or review
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	This is a competency-based, individualized text. Includes two 33 1/3 rpm recordings of business dialogues
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Average
TEACHERS' GUIDE	Teachers' Manual and Key
CONSTRUCTION	Paperback (8 1/2" x 11")
COST	Student Text $5.49 Teachers' Manual + Key 3.60
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Deals with making introductions, giving directions and instructions, communicating by telephone, effective listening, speaking (including non-verbal language), reading for meaning, and written communication.

Listening and Speaking - Life Skills Resource

TEXT: General Merchandise Retailing 1975
Gregg Division McGraw-Hill Book Company
Distribution Center
Manchester, MO 63011

STATED OBJECTIVES	No
READING LEVEL	11th grade
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	Provides structure for "real-life" learning experiences
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Black and white photographs
TEACHERS' GUIDE	Teachers' Manual plus Key
CONSTRUCTION	Paperback (8 1/2" x 11")
COST	Student Text $5.49 Teachers' Manual 3.60
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

General merchandising, retailing (entry-level) text with one very useful chapter on basic and social skills: Communications (e.g., communicating with management, employees, customers, reading and writing applications, sales and delivery tickets), Human Relations and Mathematics (calculating customer purchases, sales check forms, layaway transactions, determining sizes, postal charges, operating a cash register, etc.) in a retailing context.

Listening and Speaking - Life Skills Resource

TEXT: Skills Orientation Series: Handling Customer Complaints
Singer Career Systems
80 Commerce Drive
Rochester, NY 14623

STATED OBJECTIVES	Yes - Identify Proper Procedures for Handling Customer Complaints.
READING LEVEL	Not applicable
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	Yes
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	Instructor Lesson Plan
CONSTRUCTION	Cassette tape + film strip
COST	$36.50
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Supplementary activities plus program summary guide provided.

MATHEMATICS
VOCATIONALLY SPECIFIC RESOURCES

Mathematics - Vocationally Specific Resource

TEXT: Applied Arithmetic for Distribution, Second Edition
Instructional Materials Center
The University of Texas at Austin
Austin, TX 1976

STATED OBJECTIVES	At beginning of each section
READING LEVEL	12th grade
FREQUENT REVIEW	Pre-test
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes - Matching definition exercises
USES MORE THAN ONE LEARNING MODALITY	Projects
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	No illustrations
TEACHERS' GUIDE	No - Answer book
CONSTRUCTION	Paperback
COST	Text $8.00 Answer Book 5.00
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Not applicable

COMMENTS:

Covers word problems, computing earnings, payroll, discounts. Includes pricing, markups and markdowns, computing profits, interpreting a balance sheet, the metric system, etc.

Mathematics - Vocationally Specific Rescurce

TEXT: Dynamic Retailing
Science Research Associates (SRA)
College Division
1540 Page Mill Road, P.O. Box 10021
Palo Alto, CA 94303

STATED OBJECTIVES	No
READING LEVEL	12th grade
FREQUENT REVIEW	Short quizzes and exercises reinforcing material learned in preceeding chapter
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not applicable
USES MORE THAN ONE LEARNING MODALITY	Discussion questions, case studies, exercises and mini projects, self assessment scales
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Below average in appeal; somewhat dated photos
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback (8 1/2" x 11")
COST	$18.95
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Very few basic skills taught; however, computing inventory averages and turnover figures, calculating markups and markdowns, accounting and human relations are dealt with superficially.

Mathematics - Vocationally Specific Resource

TEXT: Mathematics Curriculum: Distributive Education
Instructional Materials Laboratory
10 Industrial Education Building
University of Missouri - Columbia
Columbia, MO 65211

STATED OBJECTIVES	Yes: Review basic computation, figure percents and discounts, determine salaries earned, and make change
READING LEVEL	10th grade
FREQUENT REVIEW	Yes - pre-post assessments
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	Yes - transparency masters
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	None
TEACHERS' GUIDE	(Teachers' Reference Sheet) + Keys
CONSTRUCTION	Loose papers
COST	Instructor $4.40 Student 2.20
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Not applicable

COMMENTS:

One of an IML Marketing and Distributive Education Series.

Mathematics - Vocationally Specific Resource

TEXT: Mathematics In Marketing 1978
McGraw Hill, Inc.
P.O. Box 402
Hightstown, NJ 08520

STATED OBJECTIVES	Performance goals are stated at the beginning of each chapter
READING LEVEL	9th grade
FREQUENT REVIEW	Reviews basic computation in first chapters
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	Transparencies also available
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Few drawings or photographs; many samples of graphs, charts, etc.
TEACHERS' GUIDE	Teachers' Manual and Key
CONSTRUCTION	Paperback (8 1/2" x 11")
COST	Student Text $5.49 Teachers' Manual + Key 3.60
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Deals with handling sales records, cash register transactions, weighing and measuring in sales, inventory mathematics and procedures, processing purchases, pricing and payroll calculations.

Designed to be used with one or more of the 14 other manuals in the Gregg Occupational Manuals and Projects in Marketing Series to prepare students for sales or sales-support jobs.

Mathematics - Vocationally Specific Resource

TEXT: Retailing Principles and Practices, Seventh Edition,
Gregg Division McGraw Hill Book Company
P.O. Box 402
Hightstown, NJ 08520

STATED OBJECTIVES	No
READING LEVEL	11th grade
FREQUENT REVIEW	Objective tests are included
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Retail sales vocabulary introduced in bold face type
USES MORE THAN ONE LEARNING MODALITY	Projects requiring students to leave the classroom and apply skills in the retail world
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Photos and drawings not appealing
TEACHERS' GUIDE	Teachers' Manual and Key
CONSTRUCTION	Hardback
COST	Student Text $11.61 Teachers' Manual + Key 4.40
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

More oriented towards retail sales theory and techniques, but includes a chapter on communications in retailing, inventory control, calculating prices, and accounts receivable.

Also available are the following:

Problems & Projects (Units 1-10)	$4.11
Problems & Projects (Units 11-22)	4.11
Objective Tests	2.49

Mathematics - Vocationally Specific Resource

TEXT: Retail Selling, Second Edition,
Gregg Division McGraw Hill
P.O. Box 402
Hightstown, NJ 08520

STATED OBJECTIVES	Yes
READING LEVEL	13th grade
FREQUENT REVIEW	Criterion-referenced measures which match stated objectives
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Selling vocabulary
USES MORE THAN ONE LEARNING MODALITY	Laboratory Manual with Task-Oriented Problems
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	Teachers' guide and answer key to text and manual
CONSTRUCTION	Hardback
COST	Student Text $11.61 Laboratory Manual 5.85 Teachers' Manual + Key 4.40
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

More of a general retail sales text, but covers: preparing a sales check, handling money + money substitutes, using a cash register, maintaining records, taking inventory, improving speech, building math skills, selling by telephone, pricing merchandise, receiving and marking merchandise.

Mathematics - Vocationally Specific Resource

TEXT: The World of Retailing
Vocational-Technical Curriculum Laboratory
Rutgers State University
4103 Kilmer Campus
New Brunswick, NJ 1975

STATED OBJECTIVES	Yes
READING LEVEL	10th grade
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	Yes
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Dated photographs
TEACHERS' GUIDE	Teacher instructions
CONSTRUCTION	Paperback
COST	Not reported
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Mostly general background on consumer education and retail sales, but includes record keeping (purchase and record keeping inventory, expense and sales), unit stock control, mark-up, etc.

MATHEMATICS
VOCATIONALLY GENERAL RESOURCES

Mathematics - Vocationally General Resource

TEXT: Basic Mathematics for the Vocational Student
Instructional Materials Laboratory
Ohio State University
Columbus, OH
1981

STATED OBJECTIVES	No
READING LEVEL	Not applicable
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	No
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback, 8 1/2" x 11"
COST	$4.50
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Basic math and metrics.

Mathematics - Vocational-General Resource

TEXT: Coordinated Vocational Education and Training: Math
Spann, (1971)
State Department of Vocational Education
Stillwater, OK 74074

STATED OBJECTIVES	Yes
READING LEVEL	Not reported
FREQUENT REVIEW	Yes
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not reported
USES MORE THAN ONE LEARNING MODALITY	Transparencies available
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Few illustrations
TEACHERS' GUIDE	Yes
CONSTRUCTION	Pages to be placed in 3-hole looseleaf
COST	Not reported
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Not reported

COMMENTS:

Seven areas: whole numbers, measurement, geometry, consumer education, percent, fractions and decimals. Each area with one or more units of instruction. Each instructional unit includes behavioral objectives, student and teacher activities, information sheets, assignment sheets, visual aids and tests.

Mathematics - Vocationally General Resource

TEXT: Math
Caleb Crowell (1982)
Education Design, Inc.
47 W. 13 Street
New York, NY 10011

STATED OBJECTIVES	Not reported
READING LEVEL	6th grade
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback
COST	$3.95
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

The first two sections are "measuring".

Mathematics - Vocational-General Resource

TEXT: Math Applied To Career Highlights (MATCH)
Learning Achievement Corp. (1981)
McGraw-Hill Publishing Company
Highstown, NJ

STATED OBJECTIVES	Yes
READING LEVEL	Not applicable
FREQUENT REVIEW	Yes
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not applicable
USES MORE THAN ONE LEARNING MODALITY	Yes
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Average
TEACHERS' GUIDE	Yes
CONSTRUCTION	Paperback
COST	Not reported
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Five workbooks relating basic math concepts to the real world of jobs and careers: number systems; addition and subtraction; multiplication and division; fractions and decimals; percent and measurement; geometry, ratio, proportion and reading graphs.

Pre- and post-tests provided. The program is supported by a complete set of microcomputer software. The software is designed for the instructor; its purpose is to generate and print out assignments, tests, drills, and individual study routines.

Mathematics - Vocationally General Resource

TEXT: Mathematics at Work: Fractions
Singer (1977)
McGraw-Hill Publishing Company
Highstown, NJ

STATED OBJECTIVES	No
READING LEVEL	Not applicable
FREQUENT REVIEW	No
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	No (answer key)
CONSTRUCTION	Paperback
COST	Paperback manual $3.96 Answer key $1.56
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Possible racial stereotyping

COMMENTS:

Another workbook in the series is Decimals.

Mathematics - Vocationally General Resource

TEXT: Mathematics for Technical and Vocational Students
Boyce, Slade and Margolis
John Wiley & Sons Publishing Company
New York, NY

STATED OBJECTIVES	No
READING LEVEL	Not applicable
FREQUENT REVIEW	Not reported
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not applicable
USES MORE THAN ONE LEARNING MODALITY	Yes
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	No
TEACHERS' GUIDE	No - solutions manual
CONSTRUCTION	Hard Bound
COST	$19.95
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Not reported

COMMENTS:

Comes with student solutions booklet and study guide, $7.95. Covers use of calculator, metric system, algebra, geometry and trigonometry. Provides practice problems, worked-out examples, and self-tests related to different trades.

Mathematics - Vocationally General Resource

TEXT: Mathematics for the Trades: A Programmed Approach
Corman and Saunders (1981)
John Wiley & Sons Publishing Company
New York, NY

STATED OBJECTIVES	Yes - Each chapter has performance objectives and a diagnostic pre-test
READING LEVEL	Not applicable
FREQUENT REVIEW	Not reported
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not reported
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Two colors with cartoons
TEACHERS' GUIDE	Yes
CONSTRUCTION	Paperback
COST	$19.95
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Not reported

COMMENTS:

Written especially for students in the trades and technical areas. Complete coverage of arithmetic, algebra, geometry, and trigonometry, Metric and English units, deals with the use of calculators, problems at all levels of difficulty.

Mathematics - Vocationally General Resource

TEXT: Proficiency Review Tapes, Unit D,
Applications Involving Money
Math House, A Division of Mosaic Media, Inc.
Dept. C981, P.O. Box 711
Glen Ellyn, IL 60137

STATED OBJECTIVES	No
READING LEVEL	Not reported
FREQUENT REVIEW	Pre-test and post-test
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not reported
USES MORE THAN ONE LEARNING MODALITY	Spirit masters of many applied money problems
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	Yes + a records management system
CONSTRUCTION	Tapes, spirit masters
COST	$179.50
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Not applicable

COMMENTS:

Ten cassette tapes covering earning money, sales tax, using a tax table, unit costs and extensions, installment buying, percent discounts, word problems, etc. written for the consumer, but may be applicable to retail.

Mathematics - Vocationally General Resource

TEXT: Vocational and Technical Math In Action
Hayden Book Company
Rochelle Park, NJ
1969

STATED OBJECTIVES	No
READING LEVEL	12
FREQUENT REVIEW	Problem set at end of book
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not applicable
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Photographs
TEACHERS' GUIDE	No
CONSTRUCTION	Paperback
COST	Not reported
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

May be used with transparencies mentioned on following page.

Mathematics - Vocationally General Resource

TEXT: Vocational and Technical Math in Action
United Transparencies, Inc.
Binghamton, NY
1979

STATED OBJECTIVES	Not applicable
READING LEVEL	Not applicable
FREQUENT REVIEW	Not applicable
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Not applicable
USES MORE THAN ONE LEARNING MODALITY	No
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes
TEACHERS' GUIDE	Yes
CONSTRUCTION	50 transparencies
COST	$101.88
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Transparencies that can be used with vocational math texts.

Mathematics - Vocationally General Resource

TEXT: Vocational Related Math
Spann, (1972)
Oklahoma State Board of Vocational and Technical Education
Stillwater, OK

STATED OBJECTIVES	Yes	
READING LEVEL	7	
FREQUENT REVIEW	No	
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	No	
USES MORE THAN ONE LEARNING MODALITY	No	
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	Yes	
TEACHERS' GUIDE	Yes	
CONSTRUCTION	For placement in looseleaf (3-hole punched)	
COST	Student Manual Teachers' Guide	$14.00 17.00
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes	

COMMENTS:

Includes measurement, whole numbers, fractions, decimals, percents, consumer education and geometry.

Mathematics - Vocationally General Resource

TEXT: Working with Math
Sushok and Shapiro (1976)
Vocational-Technical Curriculum Laboratory
Rutgers - The State University, Bldg. 4103
New Brunswick, NJ

STATED OBJECTIVES	Yes
READING LEVEL	4th grade
FREQUENT REVIEW	Yes
VOCABULARY CAREFULLY INTRODUCED AND DEFINED	Yes
USES MORE THAN ONE LEARNING MODALITY	Yes
ILLUSTRATIONS APPEALING, REALISTIC, CONTEMPORARY	No illustrations
TEACHERS' GUIDE	No
CONSTRUCTION	Separate job sheets
COST	Not reported
AVOIDS RACIAL, CULTURAL, SEXUAL STEREOTYPES	Yes

COMMENTS:

Very basic level. Laboratory approach to teaching math to students in vocational programs who are non-readers. Includes student job sheets.

Covers using a conversion table, reading micrometers, fundamental math concepts.

Section V

Review of Assessment Resources

Assessment Resources

TABLE OF CONTENTS

Vocationally Specific (p. 127)

CASHIER/CHECKER: SKILLS CHECK (measures Reading and Math)

Vocationally General (pp. 131 to 138)

BASIC SKILLS ASSESSMENT (measures Reading and Writing)
SURVEY OF BASIC SKILLS (measures Reading, Writing and Math)
INDUSTRIAL READING TEST
PERFORMANCE ASSESSMENT IN READING
TESTS OF EVERYDAY WRITING SKILLS

Life Skills (pp.141 to 165)

COMPREHENSIVE TESTS OF BASIC SKILLS (measures Reading and Math)
ADULT PERFORMANCE LEVEL SURVEY (measures Reading and Math)
SRA ACHIEVEMENT SERIES (measures Reading and Math)
MINIMUM ESSENTIALS TEST (measures Reading, Writing and Math)
MINNESOTA READING ASSESSMENT
EVERYDAY SKILLS TEST (measures Reading)
CALIFORNIA ACHIEVEMENT TEST (measures Reading and Math)
SRA READING RECORD
THE STECK-VAUGHN PLACEMENT SURVEY FOR ADULTS BASIC EDUCATION (measures Reading and Math)
BRIGANCE DIAGNOSTIC INVENTORY OF ESSENTIAL SKILLS (measures Writing)
THE MASSACHUSETTS BASIC SKILLS ASSESSMENT OF LISTENING AND SPEAKING (measures Listening and Speaking)
STANDARD DIAGNOSTIC MATH TEST
GENERAL EDUCATIONAL PERFORMANCE INDEX (measures Math)
STANFORD ACHIEVEMENT TEST (measures Math)
TEST OF PERFORMANCE IN COMPUTATIONAL SKILLS (measures Math)
ASSESSMENT SKILLS IN COMPUTATION (measures Math)
TEST OF ADULT BASIC EDUCATION (measures Math)
ADULT BASIC LEARNING EXAMINATION (measures Math)

Classroom Skills (pp. 169 to 173)

BROWN-CARLSEN LISTENING COMPREHENSION TEST
ST. EDWARDS VIDEO TEST - PRE AND POST (measures Listening)
DOW LISTENING TEST
MICHIGAN EDUCATIONAL ASSESSMENT PROGRAM (measures Listening)
COMMUNICATION COMPETENCY ASSESSMENT INSTRUMENT (measures Speaking)

Review of Assessment Resources

INTRODUCTION

The development of assessments usually comes after and lags considerably behind the development of instructional materials. The vocationally related basic skills area is no exception. Vocationally specific or vocationally general basic skills assessments are virtually non-existent. Fewer than ten assessments were found when the assessment search was limited to those two categories.

For this reason, the search for basic skills assessments at a secondary or post-secondary level was broadened to include a "Life Skills" category (i.e., adult living skills). There are many more of the life skill-type than vocational-type assessments. The content of these is often similar although the context is distinct.

In this study, whhen the basic skills included in the assessment dealt with basic skills determined by local industry to be important on the job, the assessment was included in the review section despite its "life skills" orientation as a "something is better than nothing" option. The listening and speaking assessment area posed a somewhat different problem.

Surveying the listening and speaking assessment resources which exist, it was evident that most of the work that had been done in listening and speaking assessment had been on a secondary and college level than vocationally or in terms of life skills. The school assessments were, of course, oriented to classroom oral communication skills. Telephone calls made to the International Listening Association and the Speech Communication Association revealed that no listening or speaking assessments which are vocational in orientation have thus far been developed, nor is there anything in the planning stages. Therefore, it became necessary to include in the listening and speaking reviews those assessments which are "classroom" in orientation. The skills assessed appear generalizable to vocational basic skills.

Another consideration is that the basic skills definitions (taxonomies) used in this study are functional and vocational in context, rather than academic. An academic approach usually involves the definition of sub-skills of a target skill (instructional objective). For example, this study indicates that a target skill for retail salesperson is: Completing forms using short phrases, sentences and paragraphs. Sub-skills of this (in academic terms) might be: punctuation, capitalization, neatness, grammar, diction, and composition.

In this study, industry defined the target basic skills for retail sales in vocationally oriented language. The assessment instruments in this section, however, were almost all developed with academic concepts and language. Therefore, the assessment counselor or instructor reviewing these assessments must work backwards from the targeted vocational basic skill specifying sub-skills. Then, appropriate matching and selection of non-vocational basic skills assessments can be carried out.

The problem of item context (subject matter) remains a problem in reviewing vocationally general, life skills or classroom skills basic skills assessments. These considerations and others will be discussed in the Conclusions and Recommendations section.

VOCATIONALLY SPECIFIC ASSESSMENT

TITLE: Cashier/Checker: Skills Check

Reviewers' Test Item Analysis

SKILL(S) ITEMS APPEAR TO ASSESS
Reading comprehension, making change, checking for detail on tables of written information, number sequences, cash register key simulation, related math including computation, numbering, vocationally specific word problems

ITEM ORIENTATION:	
Retail Sales	Partially
Vocational General	No
Life Skills	No
LEVEL(S) OF ITEM DIFFICULTY	Moderate
NUMBER OF ITEMS	128

General Information from Examination Copy

DEVELOPER NAME AND ADDRESS
Renton Vocational Technical Institute
Renton School District No. 403
3000 N.E. Fourth Street
Renton, WA 98055

ADMINISTRATION
Group or individual; explain general procedure aloud

DEVELOPER DESCRIPTION
One of thirteen pre-entry criterion referenced skills checks and subsequent diagnosis of areas in need of remediation: reading, spelling, math

MINUTES REQUIRED
Untimed

COST
Not reported

REPORTING FORMAT
Raw score

ALTERNATE FORMS
Not reported

RELIABILITY
Not available in Examiner Manual

PROJECT DATE(S)
1974 - 1976

SCORING
Hand with answer key

VALIDITY
Content validity to be determined by user

VOCATIONALLY GENERAL ASSESSMENTS

TITLE: Basic Skills Assessment

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
A lot of reading to find specific information, reading to draw conclusions, reading to relate new material to prior knowledge

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Some
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Moderate

NUMBER OF ITEMS: 65 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Educational Testing Service
Addison-Wesley Testing Service
2725 Sand Hill Road
Menlo Park, CA 94025

ADMINISTRATION
Individual or group; general directions read aloud for each of three subtests + writing sample

PUBLISHER DESCRIPTION
Performance in basic skills of reading, writing, math, and functional literacy

MINUTES REQUIRED
45 minutes for each subtest

COST

Test booklets (35)	$21.00
Answer sheets (100)	13.00
Scoring stencils	3.55

REPORTING FORMAT
Raw scores, standard scores cut score to be established by user

ALTERNATE FORMS
Forms A, B and C

RELIABILITY
Kuder-Richardson 20
.73 - .95

COPYRIGHT DATE(S)
1981

VALIDITY
Test based on information from schools, professional organizations, research, and relevant material from other testing programs (need technical manual for specifics)

SCORING
Machine, hand with stencil

TITLE: Survey of Basic Skills

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
A lot of reading in order to draw conclusions and reading to relate new material to prior knowledge, some reading to find specific information and a little reading in order to solve problems

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Items developed in reference to research which determined "generic" vocational skills
Life Skills	Some

LEVEL(S) OF ITEM DIFFICULTY: Moderate - high

NUMBER OF ITEMS: 18 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Cornell Institute for Occupational Education, New York State College, Cornell University, Ithaca, NY 14853

ADMINISTRATION
Group or individual; general instructions read aloud for each section

PUBLISHER DESCRIPTION
Competency in basic skills of math, language and reading

MINUTES REQUIRED
Untimed

COST
Booklet $1.35

REPORTING FORMAT
Scored by Cornell; total score, subscale scores, user norms can be calculated, diagnostic scores

ALTERNATE FORMS
No

COPYRIGHT DATE(S)
1981

RELIABILITY
Not available in Examiner Manual

SCORING
Machine

VALIDITY
Canadian generic basic skills research used in determining content

TITLE: Industrial Reading Test

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
Some reading to find specific information, some reading in order to draw conclusions and reading to relate new material to prior knowledge, a little critical reading

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Yes
Life Skills	No

LEVEL(S) OF ITEM DIFFICULTY: High (Technical Vocabulary)

TOTAL NUMBER OF ITEMS: 38

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
The Psychological Corporation
1001 Polk Street
San Francisco, CA 94109

ADMINISTRATION
Individual and group, general directions to be read aloud

PUBLISHER DESCRIPTION
Measure of reading ability developed for use in industry and vocational schools, ability to comprehend written technical materials

MINUTES REQUIRED
40 minutes

COST

Test booklets (25)	$10.00
Manual	2.85
Answer Sheet (50)	5.75
Answer Key	1.75

REPORTING FORMAT
Raw score, percentile for various groups including Skills Center and adult remedial students

ALTERNATE FORMS
Forms A and B (Form B only available to schools)

RELIABILITY
Alternate form and split-half reliability .75 - .92
Standard error of measurement .20 - 3.8

COPYRIGHT DATE(S)
1978

SCORING
Machine, hand scoring with key

VALIDITY
Content - based on training manuals students would encounter in their training

TITLE: Performance Assessment in Reading

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
Some reading to find specific information, (including a referencing section), reading in order to draw conclusions and to relate new material to prior knowledge, some reading in order to solve problems, a little reading to follow directions and reading critically

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Some
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Moderately high

NUMBER OF ITEMS: 72 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

ADMINISTRATION
Individual or group, administration

PUBLISHER DESCRIPTION
Identification of learners' needs in basic reading skills and instructional prescriptions referenced to those skills

MINUTES REQUIRED
Untimed

COST

Reusable test booklets	(35)	$20.65
Answer sheets	(25)	5.00

REPORTING FORMAT
User sets own cut scores

ALTERNATE FORMS
No

COPYRIGHT DATE(S)
Not reported

RELIABILITY
Not available in Examiner Manual

SCORING
Self-scoring answer sheet

VALIDITY
Not available in Examiner Manual

TITLE: Tests of Everyday Writing Skills (TEWS)

Reviewers' Test Item Analysis

WRITING SKILL(S) ITEMS APPEAR TO ASSESS
A lot of items on correct punctuation, some on correct spelling, some writing sentences

ITEM ORIENTATION:

Retail Sales	No
Vocational General	A few
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Moderately High (high school)

TOTAL NUMBER OF ITEMS: 100

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

PUBLISHER DESCRIPTION
Competency test in writing or composition skills that apply to everyday life situations. Objective section and writing sample.

COST
Not reported

ALTERNATE FORMS
Not presently available

COPYRIGHT DATE(S)
1978

SCORING
Machine, or hand scoring with stencil

ADMINISTRATION
Individual or group; general directions to be read aloud for each of three subtests

MINUTES REQUIRED
Untimed; examinees should be given an opportunity to attempt all items

REPORTING FORMAT
Develop own cut scores

RELIABILITY
No information in Examiner Manual

VALIDITY
No information in Examiner Manual

TITLE: Basic Skills Assessment

Reviewers' Test Item Analysis

WRITING SKILL(S) ITEMS APPEAR TO ASSESS
Conceptual representation of recording work on a work order, filling out forms, writing complaints

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Yes
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Moderate

NUMBER OF ITEMS: 75 + writing sample

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Educational Testing Service
Addison-Wesley Testing Service
2725 Sandhill Road
Menlo Park, CA 94025

PUBLISHER DESCRIPTION
Performance in basic skills of reading, writing, math, functional literacy; grades 7-12

COST

Test booklets (35)	$21.00
Answer sheets (100)	13.00
Scoring stencil	3.55

COPYRIGHT DATE(S)
1981

SCORING
Machine, hand scoring with stencil

ADMINISTRATION
Individual or group; general directions to be read aloud for each of three subtests + writing sample

MINUTES REQUIRED
45 for each sub-test

REPORTING FORMAT
Raw scores, standard scores (cut scores to be established by user)

ALTERNATE FORMS
Forms A, B, C

RELIABILITY
Kuder-Richardson 20
.73 - .95

VALIDITY
Test based on information from schools, professional organizations, research and relevant material from other testing programs (technical manual needed for specifics)

TITLE: Survey of Basic Skills: Language Arts

Reviewers' Test Item Analysis

WRITING SKILL(S) ITEMS APPEAR TO ASSESS
Some punctuation, some use of alphabetic ordering, a little indirect measure of sentence writing

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Yes
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Medium to high

NUMBER OF ITEMS: 36

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Cornell Institute for Occupational Education, New York State College, Cornell University
Ithaca, NY 14853

PUBLISHER DESCRIPTION
Competency in basic skills of math, language, and diagnostic reading, for adults

COST
Booklet $1.35

ALTERNATE FORMS
No

COPYRIGHT DATE(S)
1981

SCORING
Machine

ADMINISTRATION
Group or individual; general directions to be read aloud for each sub-test

MINUTES REQUIRED
Untimed

REPORTING FORMAT
Scored by Cornell; total score, sub-scale scores, user norms can be calculated, diagnostic scores

RELIABILITY
Not available in Examiner Manual

VALIDITY
Canadian generic basic skills research used in determining content.

TITLE: Survey of Basic Skills: Math

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Whole numbers, a little measurement, fractions, decimals, percentages, geometric formulas and algebra

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Items developed based on research which determined "generic" vocational math skills; no word problems
Life Skills	No

LEVEL(S) OF ITEM DIFFICULTY: Low - Moderate

NUMBER OF ITEMS: 60 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Cornell Institute for Occupational Education, New York State College, Cornell University
Ithaca, NY 14853

PUBLISHER DESCRIPTION
Competency in basic skills of math, language, and diagnostic reading, for adults

COST
Booklet $1.35

ALTERNATE FORMS
No

COPYRIGHT DATE(S)
1981

SCORING
Machine

ADMINISTRATION
Group or individual; general directions to be read aloud for each of eight sub-tests

MINUTES REQUIRED
Untimed

REPORTING FORMAT
Scored by Cornell; total score, sub-scale scores, user norms can be calculated, diagnostic scores

RELIABILITY
Split-half .97 for Math Test

VALIDITY
Complete domain of functional competencies covered in math (72 objectives)

LIFE SKILLS ASSESSMENTS

TITLE: Comprehensive Test of Basic Skills (CTBS)

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
Some reading to find specific information (including reference skills), reading to draw conclusions, reading to relate new material to prior knowledge

ITEM ORIENTATION:	
Retail Sales	No
Vocational General	Yes
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - High

NUMBER OF ITEMS: 110 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
10450 South Pioneer Blvd. #5
Santa Fe Springs, CA 90670

PUBLISHER DESCRIPTION
Norm-referenced, objective-based measure of basic skills achievement, criterion-referenced: reading, writing, language, math, reference skills

COST

Reusable Test Booklets (35)	$35.70
Answer Sheets (50)	10.50
Stencils	4.75

ALTERNATE FORMS
Forms U and V

COPYRIGHT DATE(S)
1981, 1982, 1983

SCORING
Machine, hand with stencils, or self-scoring

ADMINISTRATION
Group or individual; general directions to be read aloud for each of eight sub-tests

MINUTES REQUIRED

Reference	15
Reading Comprehension	40
Vocabulary	20

REPORTING FORMAT
Raw score, scaled score, percentile rank, stanine, grade equivalent

RELIABILITY
Not available in Examiner Manual

VALIDITY
Not available in Examiner Manual

TITLE: Adult Performance Level Survey (APL)

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
A lot of reading to relate new material to prior knowledge, reading in order to solve problems, referencing, some reading to find specific information and reading to draw conclusions

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Moderate

NUMBER OF ITEMS: 40 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
The American College Testing Program
26 Garden Center, Suite 3 C
Broomfield, CO 80020

PUBLISHER DESCRIPTION
Achievement and functional competency of adults, identification of facts and terms, reading, writing, computation, problem solving, community resources, occupational knowledge, consumer economics, health, government and law.

COST
In public domain

COPYRIGHT DATE(S)
1976 (after 3/15/81 in public domain)

SCORING
Hand scoring with answer key, self-scoring

ADMINISTRATION
Individual or group administration, general directions read aloud

MINUTES REQUIRED
Untimed

ALTERNATE FORMS
No

REPORTING FORMAT
Raw score, percentages

RELIABILITY
Kuder-Richardson 20 .52-.87
split half .53-.87

VALIDITY
Content validity based on University of Texas research

TITLE: SRA Achievement Series

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
Some reading to find specific information, reading in order to draw conclusions and to relate new material to prior knowledge, a little reading in order to solve problems and reading critically, reference skills

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Some (in items of higher difficulty)
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low to high

NUMBER OF ITEMS: 130 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Science Research Associates
155 N. Walker Drive
Chicago, IL 60606

ADMINISTRATION
Individual or group, general directions read aloud for each sub-test

PUBLISHER DESCRIPTION
Achievement in reading, math, language arts, reference materials, social studies and science

MINUTES REQUIRED

Reading	50
Reference	25

COST

Test booklets (25)	$28.00
Answer sheets (100)	20.95

REPORTING FORMAT
Not available in Examiner Manual

ALTERNATE FORMS
Forms 1 and 2

COPYRIGHT DATE(S)
1978

RELIABILITY
Not available in Examiner Manual

SCORING
Machine, or hand scoring

VALIDITY
Not available in Examiner Manual

TITLE: Minimum Essentials Test

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
Some reading to find specific information, to draw conclusions, and to solve problems, referencing, much reading to relate new material to prior knowledge

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	One section

LEVEL(S) OF ITEM DIFFICULTY: High

NUMBER OF ITEMS: 74 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Scott Foresman & Company
1900 East Lake Ave
Glenview, IL 60025

PUBLISHER DESCRIPTION
Test to measure minimum competency and basic skills in reading, mathematics, writing and life skills

COST

Test booklets	(35)	$24.85
Answer sheets	(35)	7.95

ALTERNATE FORMS
Forms A, B and C available

COPYRIGHT DATE(S)
1981

SCORING
Machine, or hand scoring with answer key

ADMINISTRATION
Individual or group; general directions read aloud for each sub-test

MINUTES REQUIRED

Basic Skills	45
Life Skills	45
Writing (optional)	20

REPORTING FORMAT
Raw score, percent correct; national percentile ranks reported for hand-scoring method

RELIABILITY
Not available in Examiner Manual

VALIDITY
Not available in Examiner Manual

TITLE: Minnesota Reading Assessment

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
A lot of reading to find specific information and to draw conclusions; a little reading to relate new material to prior knowledge

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Some

LEVEL(S) OF ITEM DIFFICULTY: High

NUMBER OF ITEMS: 90 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Twin Oak Publishing, Inc.
134 Mason Street
Rehobath, MA 02769

PUBLISHER DESCRIPTION
Competencies in reading relevant to school success with vocational and technical applicability

COST

Reusable test booklets (25)	$12.50
Stencil for hand scoring	3.50
Self-scoring answer sheet (50)	9.95
Hand-scoring answer sheet (50)	7.95

ALTERNATE FORMS
Forms A and B

COPYRIGHT DATE(S)
1980

SCORING
Self-scoring, or hand with stencil

ADMINISTRATION
Individual or group; general directions read aloud for each sub-test

MINUTES REQUIRED

Reading Rate & Retention	15
Vocabulary	10
Paragraph Comprehension	15

REPORTING FORMAT
Raw score, percentile score, approx. grade equivalent data also available

RELIABILITY
.90-.94 Kuder-Richardson 20
Cronbach's Horst Modified
No interform

VALIDITY
Criterion-related to
Nelson-Denny R .79
McGraw Hill Basic Skills
Reading Tests .72 and .82

TITLE: Everyday Skills Test

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
A lot of reading to find specific information, to relate new material to prior knowledge, referencing and graphs; some reading to draw conclusions, a little reading in order to solve problems, reading critically

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Moderate

NUMBER OF ITEMS: 95 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

PUBLISHER DESCRIPTION
Criterion-referenced tests in the basic skills of reading and math required in everyday life:
norm-referenced tests use of graphics, reference material, and math computation

COST

Reusable test booklets (35)	$12.25
Scoring stencils	3.25
Answer sheets (50)	5.00

ALTERNATE FORMS
No

COPYRIGHT DATE(S)
1969, 1973, 1975

SCORING
Machine, or hand with stencil

ADMINISTRATION
Individual or group, general directions read aloud for each sub-test

MINUTES REQUIRED
Part timed, part untimed (Reading B - 30 min.)

REPORTING FORMAT
Set own criterion for mastery of criterion-referenced tests. Norm-referenced tests have grade equivalent conversions.

RELIABILITY
Not available in Examiner Manual

VALIDITY
Not available in Examiner Manual

TITLE: California Achievement Test (CAT)

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
Some reading to find specific information, including referencing (tables, dictionary, map, guide), some reading to draw conclusions, to relate new material to prior knowledge, and a little critical reading

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Some

LEVEL(S) OF ITEM DIFFICULTY: Low to high (locator test required)

NUMBER OF ITEMS: 95 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

PUBLISHER DESCRIPTION
Norm-referenced and criterion-referenced

COST

Reusable test booklets (35)	$36.05
Self-scoring answer sheets (25)	8.00

ALTERNATE FORMS
Forms C and D

COPYRIGHT DATE(S)
1977, 1978 (revised from 1970)

SCORING
Machine, hand with answer key, or self-scoring

ADMINISTRATION
Individual or group, general directions read aloud for each sub-test

MINUTES REQUIRED

Reading	45
Reference	25

REPORTING FORMAT
Raw score, grade equivalent, scaled score, percentile rank, stanine

RELIABILITY
Not available in Examiner Manual

VALIDITY
Not available in Examiner Manual

TITLE: SRA Reading Record

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
Some reading to find specific information, in order to draw conclusions and to relate new material to prior knowledge, a little referencing (advertisement charts, graphs, indexes, etc.)

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Some

LEVEL(S) OF ITEM DIFFICULTY: Moderately high - High

NUMBER OF ITEMS: 106 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Science Research Associates
259 East Erie Street
Chicago, IL 60611

PUBLISHER DESCRIPTION
Basic skills in reading

COST

Reusable test booklets	(25)	$38.30
Answer sheets	(100)	20.95

ALTERNATE FORMS
No

COPYRIGHT DATE(S)
1958

SCORING
Self-interpreting profile, percentile scores by grade (6-12)

ADMINISTRATION
Group administration; general directions read aloud for each sub-test

MINUTES REQUIRED
10 tests (2-5 min. each)
Total 31 minutes

REPORTING FORMAT
Not available in Examiner Manual

RELIABILITY
Not available in Examiner Manual

VALIDITY
Correlations with other reading and general ability tests are quite high (.63 - .84). (See Manual)

TITLE: The Steck-Vaughn Placement Survey for Adult Basic Education

Reviewers' Test Item Analysis

READING SKILL(S) ITEMS APPEAR TO ASSESS
Some reading to find specific information, and reading to relate new material to prior knowledge; much reading in order to draw conclusions; a little critical reading; some referencing

ITEM ORIENTATION:

Retail Sales	No
Vocational General	Some
Life Skills	Some

LEVEL(S) OF ITEM DIFFICULTY: Test has two levels
Very low - Moderately difficult

NUMBER OF ITEMS: 61 - Reading

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Steck-Vaughn Company
P.O. Box 2028
Austin, TX 78768

ADMINISTRATION
Individual or group administration

PUBLISHER DESCRIPTION
Achievement in vocabulary, reading language and math; two forms available for each level

MINUTES REQUIRED
Untimed

COST

Reusable test booklets (25)	$66.00
Answer sheets (50)	6.00

ALTERNATE FORMS
Forms K & L = grades 0-4
Forms M & Q = grades 4-8

REPORTING FORMAT
Raw score and grade equivalent (scores are prescriptive with regard to use of Steck-Vaughn individualized programs)

COPYRIGHT DATE(S)
1981

RELIABILITY
No information in Examiner Manual

SCORING
Answer template

VALIDITY
No information in Examiner Manual

TITLE: Minimum Essentials Test

Reviewers' Test Item Analysis

WRITING SKILL(S) ITEMS APPEAR TO ASSESS
Some punctuation and subjective measures of spelling, punctuation, and writing phrases, sentences neatly

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Moderate

TOTAL NUMBER OF ITEMS: 50 + writing sample

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Scott Foresman and Company
1900 East Lake Avenue
Glenview, IL 60025

PUBLISHER DESCRIPTION
Test to measure minimum competency and basic skills in reading, math, writing, and life skills; grades 8-12 and Adult

COST

Test booklets (35)	$24.85
Answer sheets (35)	7.95

ALTERNATE FORMS
Forms A, B, and C

COPYRIGHT DATE(S)
1981

SCORING
Machine, hand with answer key

ADMINISTRATION
Individual or group administration; general directions to be read aloud for each of three subtests

MINUTES REQUIRED

Basic Skills	45
Life Skills	45
Writing (optional)	20

REPORTING FORMAT
Raw score, percent correct, national percentile ranks reported for hand scored method

RELIABILITY
Not available in Examiner Manual

VALIDITY
Not available in Examiner Manual

LIFE SKILLS ASSESSMENT ------ LISTENING

TITLE: The Massachusetts Basic Skills Assessment of Listening and Speaking

Reviewers' Test Item Analysis

SKILL(S) ITEMS APPEAR TO ASSESS
Identifying and understanding the main idea, associating important details with the main idea, critical listening (understanding speaker's purpose), following directions, summarizing information and drawing conclusions.

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills/Classroom Skills	Both

LEVEL(S) OF ITEM DIFFICULTY: Low to High (secondary level)

NUMBER OF ITEMS: 50

General Information from Examination Copy

DEVELOPER NAME AND ADDRESS
Massachusetts Dept. of Education
Bureau of Research and Assessment
39 St. James Avenue
Boston, MA 02116

ADMINISTRATION
Group, multiple choice, written passages provided - for making of a tape

PUBLISHER/DEVELOPER DESCRIPTION
A general descriptive test of listening ability
(placement not diagnostic)

MINUTES REQUIRED
Not reported

COST
Not reported

REPORTING FORMAT
Raw score, percentage score

ALTERNATE FORMS
A-1 Form 3

COPYRIGHT DATE(S)
1980

RELIABILITY
Hoyt estimate of reliability (internal consistency) .76

SCORING
Answer key

VALIDITY
Content validity determined by a panel of "expert judges" in a blind review of the items

LIFE SKILLS ASSESSMENT ------ SPEAKING

TITLE: The Massachusetts Basic Skills Assessment of Listening and Speaking

Reviewers' Test Item Analysis

SPEAKING SKILL(S) ITEMS APPEAR TO ASSESS
Delivery or transmission of message (volume, rate, articulation); organization or structure (sequence and relationship); content (quantity, relevance and adaptation), and language (grammar and choice or words)

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills/Classroom Skills	Both

LEVEL(S) OF ITEM DIFFICULTY: Low to High (secondary level)

NUMBER OF ITEMS: Not reported

General Information from Examination Copy

DEVELOPER NAME AND ADDRESS
Massachusetts Dept. of Education
Bureau of Research and Assessment
39 St. James Avenue
Boston, MA 02116

ADMINISTRATION
Group, multiple choice, written passages provided for making of a tape

PUBLISHER/DEVELOPER DESCRIPTION
A general descriptive test of speaking ability
(placement not diagnostic)

MINUTES REQUIRED
Not reported

COST
None

REPORTING FORMAT
Raw score, percentage score

ALTERNATE FORMS
A-1 Form 3

COPYRIGHT DATE(S)
1980

RELIABILITY
Hoyt estimate of reliability (internal consistency) .76

SCORING
Answer key

VALIDITY
Content validity determined by a panel of "expert judges" in a blind review of the items

TITLE: Comprehensive Tests of Basic Skills

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Some whole numbers, measurements, fractions, decimals; a lot of practical problems, weak on percentages, some algebra, ratio and geometry

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - High

NUMBER OF ITEMS: 98 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

ADMINISTRATION
Individual or group; general directions to be read aloud for each of eight sections

PUBLISHER DESCRIPTION
Measures level of attainment in language, number and problem-solving skills for academic and everyday needs; seven levels range from K - 12.

MINUTES REQUIRED

Math Computation	40
Math Concepts	35

ALTERNATE FORMS
Forms S and T

COST

Test booklets (35)	24.85
Hand scoreable answer sheets (50)	6.50
Scoring stencil	3.25

REPORTING FORMAT
Grade equivalent, standard score, percentile, stanine; norms available

COPYRIGHT DATE(S)
1973

RELIABILITY
Not available in Examiner Manual

SCORING
Machine, hand with stencils, or self-scoring

VALIDITY
Not available in Examiner Manual

TITLE: Stanford Diagnostic Math Test

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Measures computation, concepts, and applications in whole numbers, fractions, decimals, practical (word) problems, percentages, ratio, algebra, a lot of grapns, some geometry

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - High

NUMBER OF ITEMS: 120 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Harcourt Brace Janovich
Psychology Corporation
1001 Polk Street
San Francisco, CA 94109

PUBLISHER DESCRIPTION
Measures competence in basic concepts and skills in math; diagnostic; identifies strengths and weaknesses (number system and numeration, computation applications)

COST

Test booklets (35)	19.00
Key	1.75
Answer documents	4.75

ALTERNATE FORMS
Two

COPYRIGHT DATES
1976

SCORING
Machine, hand

ADMINISTRATION
Group or individual, general directions to be read aloud for each of three sub-tests

MINUTES REQUIRED

Number system	25
Computation	35
Application	30

REPORTING FORMAT
Raw score, percentile rank, stanine, grade equivalent, scaled scores

RELIABILITY
Kuder-Richardson 20
.88 - .97; standard error of measurement 2.3 - 4.5; alternate forms .81 - .95

VALIDITY
69 - .94 correlation with Standford Achievement Test in Math

TITLE: California Achievement Test

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS

Tests both computation and application: whole numbers, a little measurement, fractions, a lot of decimals, percentages, practical (word) problems, some algebra, geometry and graphs

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - High

NUMBER OF ITEMS: 85 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

PUBLISHER DESCRIPTION
Norm-referenced and criterion-referenced

COST

Reusable test booklets (35)	$36.05
Self-scoring answer sheets (25)	8.00

ALTERNATE FORMS
Forms C and D

COPYRIGHT DATE(S)
1977, 1978, revised from 1970 edition

SCORING
Machine, hand with answer keys, or self-scoring

ADMINISTRATION
Individual or group; general directions read aloud for each subtest

MINUTES REQUIRED

Math	60

REPORTING FORMAT
Raw score, grade equivalent, scaled score, percentile rank, stanine

RELIABILITY
Not available in Examiner Manual

VALIDITY
Not available in Examiner Manual

TITLE: Minimum Essentials Test

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Whole numbers, fractions, decimals, a few percentages, many practical (word) problems

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - Moderate

NUMBER OF ITEMS: 64 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Scott, Foresman & Company
1900 East Lake Ave.
Glenview, IL 60025

PUBLISHER DESCRIPTION
Test to measure minimum competency and basic skills in reading, mathematics, writing and life skills

COST

Test booklets	(35)	$24.85
Answer sheets	(35)	7.95

ALTERNATE FORMS
Forms A, B, and C available

COPYRIGHT DATE(S)
1981

SCORING
Machine, or hand scoring with answer key

ADMINISTRATION
Individual or group; general directions read aloud for each sub-test

MINUTES REQUIRED

Basic skills	45
Life skills	45
Writing (optional)	20

REPORTING FORMAT
Raw score, percent correct, national percentile ranks reported for hand-scoring method

RELIABILITY
Not available in Examiner Manual

VALIDITY
Not available in Examiner Manual

TITLE: General Educational Performance Index

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Whole numbers, measurement, fractions, decimals, some percentages, a lot of algebra, a little geometry and graphs; all twenty-three problems are practical (word) problems

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: High

NUMBER OF ITEMS: 23 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Steck-Vaughn Company
P.O. Box 2028
Austin, TX 78768

ADMINISTRATION
Individual or group; general introduction read aloud

PUBLISHER DESCRIPTION
GED preparedness tests, indicates areas in need of attention prior to attempting GED. Writing, social studies, science, reading and math

MINUTES REQUIRED
Untimed

COST

Reusable tests (10)	$30.00
Answer sheets (50)	4.00

REPORTING FORMAT
Raw score converted to standard score which can be used to determine cut scores for each section

ALTERNATE FORMS
Forms AA and BB available

COPYRIGHT DATE(S)
1981

RELIABILITY
Alternate forms correlation coefficients = .67 - .82

SCORING
Hand using template

VALIDITY
Content: based on material used in GED training programs
Predictive: correlation coefficients between GEPI and GED ranged between .61 and .73

TITLE: The Adult Performance Level Survey (APL)

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
All 13 items are word problems dealing with whole numbers, fractions, decimals and percentages

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - Moderate

NUMBER OF ITEMS: 13 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
The American College Testing Program
26 Garden Center, Suite 3 C
Broomfield, CO 80020

PUBLISHER DESCRIPTION
Achievement and functional competency of adults, identification of facts and terms, reading, writing, computation, problem-solving, community resources, occupational knowledge, consumer economics, health, government and law

COST
Not reported

ALTERNATE FORMS
No

COPYRIGHT DATE(S)
1976

SCORING
Not reported

ADMINISTRATION
Group or individual; general directions to be read aloud

MINUTES REQUIRED
Untimed

REPORTING FORMAT
Raw score, percentages

RELIABILITY
Kuder-Richardson - 20
.52 - .87;
Split-half .53 - .87

VALIDITY
Content validity based on University of Texas research

TITLE: Stanford Achievement Test

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Measures computation, concepts and applications of whole numbers, fractions, decimals, percentages, algebra, graphs and geometry

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - High

NUMBER OF ITEMS: 120 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Harcourt Brace Jovanovich
Psychology Corporation
1001 Polk Street
San Francisco, CA 94109

PUBLISHER DESCRIPTION
Achievement test, measurement and assessment of learning at different levels

COST

Test Booklets (35)	$27.25
Key	2.85
Answer Documents (35)	5.00

ALTERNATE FORMS
Forms A, B, C

COPYRIGHT DATE(S)
1972 Copyright (1923, 1929, 1940, 1953, 1964)

SCORING
Machine, or hand scoring with stencil keys

ADMINISTRATION

MINUTES REQUIRED

Math Concepts	20
Math Computation	35
Math Application	35

REPORTING FORMAT
Raw scores, percentile ranks, stanines, grade equivalents, scaled scores

RELIABILITY
Spearman Brown .85-.96
Kuder-Richardson 20 .85-.96
SEM 2.6 - 4.0

VALIDITY
Content validity

TITLE: Test of Performance in Computational Skills (TOPICS)

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Whole numbers, measurement, a few fractions, a lot of decimals; all 72 items are practical (word) problems with consumer education emphasis

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - Moderate

TOTAL NUMBER OF ITEMS: 72

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

PUBLISHER DESCRIPTION
Proficiency in basic math skills needed in adult life; diagnostic and evaluative

COST

Test booklets (35)	24.50
Answer sheets (50)	5.50

ALTERNATE FORMS
Forms A, AE

COPYRIGHT DATE(S)
1978

SCORING
Machine, hand, self

ADMINISTRATION
Individual or group; general directions to be read aloud for each of two sections

MINUTES REQUIRED
About 50 minutes for each of two sections; allow enough time for every item to be attempted

REPORTING FORMAT
Class report, individual report, frequency distributions, cut score to be established by user

RELIABILITY
No information in Examiner Manual

VALIDITY
No information in Examiner Manual

TITLE: Assessment Skills in Computation

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Whole numbers, measurement, fractions, decimals, a little percentage, plus geometry; all 72 items are practical (word) problems

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - Moderate

TOTAL NUMBER OF ITEMS: 72

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93940

ADMINISTRATION
Individual or group administration; general directions to be read aloud for each of two sections

PUBLISHER DESCRIPTION
Measures ability to handle computation problems typically encountered in everyday living, diagnostic, prescriptive; may be used in remedial program for adults

MINUTES REQUIRED
Untimed

COST

Reusable test booklets (35)	22.40
Answer sheets	5.75

REPORTING FORMAT
Cut score established by user

ALTERNATE FORMS
No

COPYRIGHT DATE(S)
Not reported

RELIABILITY
Not available in Examiner Manual

SCORING
Not reported

VALIDITY
Not available in Examiner Manual

TITLE: Test of Adult Basic Education (TABE)

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Tests computation, concepts and applications of whole numbers, and fractions; covers computation and concepts of measurement and decimals; tests concepts and applications of percentages; many practical (word) problems.

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - Moderately High

NUMBER OF ITEMS: 108 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
CTB/McGraw-Hill
Del Monte Research Park
Monterey, CA 93940

ADMINISTRATION
Individual or group; general directions read aloud for each section

PUBLISHER DESCRIPTION
3 levels - Easy, Medium, Difficult
Achievement in reading, math, language
-adopted from 1970 edition of California Achievement Test

MINUTES REQUIRED
Math 65

COST

Test booklets (25)	$21.25
Answer sheets (50)	10.50

REPORTING FORMAT
Group record sheet, Student Profile sheet, analysis of learning difficulties, raw score, scaled score, and grade equivalent for each area (3) and each sub area (6)

ALTERNATE FORMS
Two parallel forms for each level

COPYRIGHT DATE(S)
1976 edition, revised from earlier edition

RELIABILITY
No information in Examiner Manual (technical manual in preparation)

SCORING
Hand scoring with answer key, overlay available

VALIDITY
No information in Examiner Manual

TITLE: SRA Achievement Series

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Whole numbers, a little measurement, fractions, decimals, percentages, algebra, geometry and graphs; emphasis on practical (word) problems

ITEM ORIENTATION:	
Retail Sales	No
Vocational General	No
Life Skills	Yes
LEVEL(S) OF ITEM DIFFICULTY	Low - High
NUMBER OF ITEMS	100 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Science Research Associates
155 N. Walker Drive
Chicago, IL 60606

PUBLISHER DESCRIPTION
Achievement in reading, math, language arts, reference materials, social studies and science

COST

Test booklets (25)	$28.00
Answer sheets (100)	20.95

ALTERNATE FORMS
Forms 1 and 2

COPYRIGHT DATE(S)
1978

SCORING
Machine, hand

ADMINISTRATION
Individual or group, general directions read aloud for each sub-test

MINUTES REQUIRED
Math 90

REPORTING FORMAT
Not available in Examiner Manual

RELIABILITY
Not available in Examiner Manual

VALIDITY
Not available in Examiner Manual

TITLE: Steck-Vaughn Placement Survey for Adults Basic Education

Reviewers' Test Item Analysis

MATH SKILL(S)/CONCEPTS ITEMS APPEAR TO ASSESS
Whole numbers, fractions, decimals, percentages; most emphasis on practical (word) problems; a little geometry.

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Moderate

NUMBER OF ITEMS: 54 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Steck-Vaughn Company
P.O. Box 2028
Austin, TX 78768

ADMINISTRATION

PUBLISHER DESCRIPTION
Achievement in vocabulary, reading, language and math. Two forms available for each level.

MINUTES REQUIRED
Untimed

COST

Reusable test booklets (25)	$66.00
Answer sheets (50)	6.00

REPORTING FORMAT
Raw score and grade equivalent (scores are presecriptive with regard to use of Steck-Vaughn individualized programs)

ALTERNATE FORMS
Forms K & L = grades 0-4
Forms M & Q = grades 4-8

COPYRIGHT DATE(S)
1981

RELIABILITY
No information in Examiner Manual

SCORING
Answer template

VALIDITY
No information in Examiner Manual

TITLE: Adult Basic Learning Examination (ABLE)

Reviewers' Test Item Analysis

MATH SKILL(S) ITEMS APPEAR TO ASSESS
Whole numbers, a little measurement, fractions, decimals, percentages and many practical (word) problems, algebra and graphs

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills	Yes

LEVEL(S) OF ITEM DIFFICULTY: Low - Moderate

NUMBER OF ITEMS: 50 - Math

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Harcourt Brace Janovich, Inc.
Psychology Corporation
1001 Polk Street
San Francisco, CA 94109

ADMINISTRATION
Group or individual; vocabulary and spelling are dictated; general directions to be read aloud for each sub-test

PUBLISHER DESCRIPTION
Measure of educational achievement among adults: vocabulary, reading, spelling, arithmetic computation and problem-solving, arithmetic total

MINUTES REQUIRED
Untimed

COST
Test Booklets (35) 34.50
(Three separate booklets required)

REPORTING FORMAT
Raw score, grade score

ALTERNATE FORMS
Forms A and B

COPYRIGHT DATE(S)
1967

RELIABILITY
Split Half .60 - .96

SCORING
Machine, or hand scoring with answer key

VALIDITY
Not reported in Examiner Manual

CLASSROOM SKILLS ASSESSMENTS

TITLE: Brown-Carlsen Listening Comprehension Test

Reviewers' Test Item Analysis

SKILL(S) ITEMS APPEAR TO ASSESS
Some listening carefully to ensure understanding of main intent or thrust of what speaker is saying; to identify whether what is said is based on opinion or fact.

ITEM ORIENTATION:	
Retail Sales	No
Vocational General	A little
Life Skills/Classroom Skills	Classroom
LEVEL(S) OF ITEM DIFFICULTY	Moderate - High
NUMBER OF ITEMS	76

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Communications Development Inc.
25 Robb Farm Road
St. Paul, Minnesota 51510

ADMINISTRATION
Group or individual;
oral administration
General directions to be read aloud for each sub-test

PUBLISHER DESCRIPTION
Test of ability to comprehend spoken language

MINUTES REQUIRED
Untimed

COST

Manual	$ 8.00
Answer sheet (35)	10.00
Answer key	5.00

REPORTING FORMAT
Raw score, standard score, percentile rank

ALTERNATE FORMS
Forms AM and BM

COPYRIGHT DATE(S)
Not reported

RELIABILITY
Split Half .84 - .90
Alternate Forms .84 - .90

SCORING
Machine, or hand scoring with stencil

VALIDITY
Correlations with reading, I.Q. tests, and language tests

TITLE: St. Edwards Video Test (Pre and Post)

Reviewers' Test Item Analysis

LISTENING SKILL(S) ITEMS APPEAR TO ASSESS
Literal listening (to get information and remember details)

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills/Classroom Skills	Classroom skills

LEVEL(S) OF ITEM DIFFICULTY: Moderate

NUMBER OF ITEMS: 16

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
HBJ Media Systems Corporation
A subsidiary of Harcourt Brace Janovich
757 Third Avenue
New York, NY 10017

ADMINISTRATION
1/2" color video, or an audio tape; student requires pencil, answer sheet, and note-taking sheet

PUBLISHER DESCRIPTION
Note taking ability, ability to follow directions, short and intermediate term memory, and the ability to focus attention on a complex aural message (pre-test for listening course at St. Edward's University)

MINUTES REQUIRED
40

COST
Audio and video tape versions $75.00

REPORTING FORMAT
Norms on high schoool and college students available

ALTERNATE FORMS
Pre and post

COPYRIGHT DATE(S)
1982

RELIABILITY
Information not available in Examiner Manual

SCORING
Cut-off set at 88% correct of Part 1 (Listening to get information) and 67% correct of Part 2 (Remembering Details)

VALIDITY
Information not available in Examiner Manual

TITLE: Dow Listening Test

Reviewers' Test Item Analysis

SKILL(S) ITEMS APPEAR TO ASSESS
Listening comprehension; receipt, storing and analyzing information.

ITEM ORIENTATION:

Retail Sales	No
Vocational General	No
Life Skills/Classroom Skills	Classroom skills

LEVEL(S) OF ITEM DIFFICULTY: High (high school seniors and college freshmen)

NUMBER OF ITEMS: 32

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Listening Lab
St, Edward's University
Austin, TX

ADMINISTRATION
Group or individual;
audio tape oral instructions

PUBLISHER/DEVELOPER DESCRIPTION
Testing listening comprehension of high school seniors and college freshmen; tests the receipt, storing and analyzing aural information

MINUTES REQUIRED
Timed - but number of minutes not specified in review materials

COST
Not reported

REPORTING FORMAT
Not reported

ALTERNATE FORMS
No

RELIABILITY
Not available in Examiner Manual

COPYRIGHT DATE(S)
1950's - revised

VALIDITY
Not available in Examiner Manual

SCORING
Self-scored

VALIDITY
Not available in Examiner Manual

TITLE: Michigan Educational Assessment Program (MEAP)

Reviewers' Test Item Analysis

SKILL(S) ITEMS APPEAR TO ASSESS
Listening to the main intent, listening for details

ITEM ORIENTATION:

Retail Sales	No
Vocationally General	No
Life Skills/Classroom Skills	Classroom

LEVEL(S) OF ITEM DIFFICULTY: Moderate (10th grade)

NUMBER OF ITEMS: 13 listening passages (24 items)

General Information from Examination Copy

DEVELOPER NAME AND ADDRESS
Michigan Dept. of Education
Michigan Educational Assessment Program
Box 30008
Lansing, MI 48909

ADMINISTRATION
Audio tapes

PUBLISHER/DEVELOPER DESCRIPTION
Not reported

MINUTES REQUIRED
Untimed

COST
No cost

REPORTING FORMAT
Raw score

ALTERNATE FORMS
For Grades 4 and 7

COPYRIGHT DATE(S)
1979-80

RELIABILITY
Kuder Richardson 20 used, but no specifics cited in manual

SCORING
Cut score - 2 out of 3 items correct per objective (8),
Scoring keys

VALIDITY
Technical Manual available

TITLE: Communication Competency Assessment Instrument (CCAI)

Reviewers' Test Item Analysis

SKILL(S) ITEMS APPEAR TO ASSESS
Communication codes, oral message evaluation, basic speech communication skills, human relations, basic speech communication skills human relations

ITEM ORIENTATION:

Retail Sales	No
Vocational General	(The 19 competencies could be applied to an occupational context according to the Speech Communication Association's 1978 Task Force.)
Life Skills/Classroom Skills	Classroom

LEVEL(S) OF ITEM DIFFICULTY: Low to High

NUMBER OF ITEMS: 57 (long form); 19 (short form)

General Information from Examination Copy

PUBLISHER NAME AND ADDRESS
Speech Communication Association
5105 Backlick Rd.
Suite E
Anmandale, VA 22023

ADMINISTRATION
Videotape

PUBLISHER/DEVELOPER DESCRIPTION
Directly assesses college level speaking and listening skills

MINUTES REQUIRED
Not reported

COST
Not reported

REPORTING FORMAT
Not reported

ALTERNATE FORMS
Short and long

RELIABILITY
Reliability testing being carried out at University of Wisconsin - Parkside. Initial coefficient alphas, inter-rater reliability coefficients support validity of instruments.

COPYRIGHT DATE(s)
1980

SCORING
Performance rating scale

VALIDITY
Content validity established by subject matter experts

Section VI

Final Conclusions And Recommendations

Conclusions and Recommendations

BASIC SKILLS

The industry participants in this study indicated that thirty-two percent of all the basic skills retail salespersons use on the job involve some type of listening. Speaking is of comparable importance, accounting for 29% of the basic skills used. Reading accounts for 15%, Mathematics for 13% and Writing for 11%.

A retail salesperson uses complex oral communication skills. The LISTENING that they do consists of the complete range of listening skills from the taxonomy. Listing them in terms of frequency of use, they are: listen to job instructions, listen carefully, listen actively, listen to customer complaints, listen to formal instructions, listen sympathetically or empathetically, listen for abnormal noises, observe non-verbal language.

The SPEAKING skills are also varied and difficult. They include participation in various types of conversations from informal to group discussions. Verbal persuasion and negotiation skills are expected. Giving information and opinions and problem solving with other people are also important.

The READING retail salespeople do most frequently is of forms and correspondence. They also look up information in catalogs, the telephone book, and on tables and charts outside of books. They read reference books and also technical journals.

Retail sales MATHEMATICS skills are much less complex than their oral communication skills. They must be able to do basic calculations, estimate, measure, convert measurements and use a calculator.

WRITING skills are used the least often by retail salespeople. The writing is about one-half completing forms and one-half writing notes or messages. Extensive writing skills are not needed.

In summary, analysis of the data collected for this project suggests that an instructor attempting to link basic skills subjects with vocational training for retail salespeople should stress listening, speaking, reading, math, and writing in that order.

INSTRUCTIONAL RESOURCES

Listening and Speaking

Since oral communication is so essential in retail sales, it is fortunate that some vocationally specific texts and/or chapters within texts which teach it have been developed.

There were two vocationally specific listening and speaking resources and five vocationally general resources reviewed.

Reading

No vocationally specific reading materials were found. However, two vocationally general resources were reviewed somewhat positively and there were reading activities in some of the communications texts.

Mathematics

One somewhat vocationally specific resource was found. However, most of the mathematics resources are vocationally general with a chapter or two specific to the math in retail sales.

Writing

Two vocationally specific resources and five vocationally general materials which teach related writing skills were found.

In summary, so few vocationally specific retail sales materials which teach basic skills exist, there is a need for curricula development. In the interim, instructors usually adapt materials or create their own.

ASSESSMENT RESOURCES

Approximately fifty assessments were reviewed by the subject matter experts. Thirty of those assessments met minimal review criteria. Their item orientation (context) are as follows: one of the thirty is somewhat Vocationally Specific, five are Vocationally General, eighteen are Life Skills, and five are Classroom Skills.

No retail sales basic skills assessment was found. However, an assessment which comes the closest to vocationally specific is "Cashier/Checker: Skills Check". It is a diagnostic assessment which covers some reading, writing and mathematics skills salespeople use, but not all. No reliability or validity measures are cited for it; however, face validity appears quite high. Whether or not the difficulty level of the assessment items is correct is not known, but could be checked with retail salespeople.

Retail sales listening and speaking assessments do not appear to have been developed.

The basic skills retail salespeople need are evaluated to varying degrees by the Vocationally General, Life Skills and Classroom Skills assessments reviewed in the project.

Listening

Traditionally, listening skills are defined as: literal listening (receipt of an oral message), interpretive listening (decoding the message) and evaluative listening (judging the importance of the message, assessing speaker bias, and deciding on a response).

Five assessments of listening were reviewed. Three of the five tested literal listening skills, two tested interpretive, and two critical skills. The item context is usually classroom skills, but many of those skills are also needed on the job.

Speaking

Traditional academic definitions of speaking skills are often: pronunciation (articulating particular sounds); grammar (combining word forms or combining words into phrases and sentences according to prescribed rules; diction (choosing appropriate words and expressions according to their actual and implied meaning, and content (quantity, relevance and adaptation).

There were only two speaking assessments found. They fell into the Life Skills and Classroom Skills catagories. The "Massachusetts Basic Skills Assessment of Listening and Speaking" evaluates pronunciation (volume, rate and articulation), grammar, diction and content. The "Communication Competency Assessment Instrument" emphasizes communication codes, oral messages, and human relations. The human relations portion might link well with the target skill of responding appropriately to customers and fellow employees.

Assessing speaking skills presents perhaps the greatest challenge of all the basic skills. Reliability, validity, and test bias are the hardest to address in this skill area. Since videotaping and observer ratings are usually the means of dealing with these issues, it is a comparatively expensive area to assess.

Reading

Traditional definitions of reading skills are: perceptual (psychomotor), decoding (sight vocabulary, structural analysis and syllabification), and comprehension (literal, interpretive, critical and reading rate). These may be seen as sub-skills of the targeted skills for retail sales: referencing, reading forms, correspondence, technical journals and tables and charts outside of books.

The "Cashier/Checker: Skills Check" mentioned before is the most content-related assessment of some of the targeted reading skills. However, it is a diagnostic rather than a placement tool.

Many of the Life Skills and Vocationally General reading assessments dealt with reference skills which a retail salesperson needs. The "Basic Skills Assessment" was judged by the subject matter experts to be the best non-specific reading assessment in that the content was closest to actual forms, charts, tables, etc. used at work and contains reading to find specific information, to draw conclusions and to relate new material to prior knowledge.

Mathematics

In the area of mathematics there is less difficulty with differences in taxonomies and instructional contexts. Descriptions of math skills tend to be more standard whether the focus is vocational or academic.

Again the "Cashier/Checker: Skills Check" probably comes closest to assessing relevant math abilities.

Half of the thirty assessments positively reviewed evaluate math skills. Most of those fell into the Life Skills category. However, none of the Vocationally General or Life Skills math assessments contain the exact mix of the fundamental math skills that retail salespeople need. None test for the use of a calculator.

The subject matter experts judged the "Stanford Math Achievement Test" (Blue Level) and the "Comprehensive Test of Basic Skills" math assessment to be the most suited of those reviewed for a retail sales mathematics placement test.

Writing

Traditionally writing skills are defined as: mechanics (alphabetical ordering, neatness, spelling and punctuation), grammar and composition. These skills underlie retail sales basic skills which are: writing notes and messages to oneself and others and completing forms with abbreviations, numbers, short phrases, sentences and paragraphs.

Only five of the assessments reviewed dealt with writing skills. Four of those five covered mechanics, all five dealt with phrase and sentence writing and none with composing paragraphs. Of the tests reviewed, few required actual writing samples and where writing samples were provided, no scoring criteria were supplied with them. Actual writing skills are generally inferred from objective-type questions.

The "Basic Skills Writing Assessment" was judged by the subject matter experts to be the closest measure of writing which was not vocationally specific. Perhaps only selected items related to the limited number of salesperson writing skills could be used.

If selecting from the assessments in this study, it is perhaps important to consider whether the vocational institution has a related basic skills program which runs concurrently with the retail sales vocational instruction. If there are no related basic skills classes in mathematics and reading, the vocationally specific assessment would be the best indicator of whether a student had sufficient basic skills ability to successfully complete retail sales training.

However, if an institution did have related basic skills classes which a student enrolled in as they went through training, the vocationally general, life or classroom skills assessments might prove better placement instruments in that most of these give a range of item difficulty and generally have test norms established.

Of course, each institution should choose its basic skills assessment or assessments based on such other considerations as population served, assessment cost, scoring, alternate forms, administration, reliability, validity, etc.

Since apparently no assessment meets all of the basic skills testing needs for retail salespeople, it may be necessary to select several assessments or sections of assessments in order to cover all the related basic skills in a placement test. Additional test items may then have to be created and validated to fill in the gaps.

Developing assessments 'from scratch' which are criterion-referenced to an institution's retail sales basic skills curricula is also a possibility, although a rather expensive and long-term one if item validation is done. Determining appropriate level of skill difficulty is another facet of basic skills assessment work which should be done at some future time.

Finally, building institutional or local norms on the test(s) selected or created is another option. This would validate them in a predictive sense. In vocational assessment centers, these data could be collected and the cut scores for entry and exit could then be set with considerable predictive accuracy. If test-taking were computerized, it would facilitate this process a great deal.

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APPENDIX C

RETAIL SALES DACUM CHART

RETAIL SALESPERSON SKILL PROFILE

Duty:	Competencies:				
SATISFY EVERY CUSTOMER	UNDERSTAND THE IMPORTANCE OF CUSTOMER SERVICE AND SAFETY	LISTEN ATTENTIVELY AND RESPOND TO CUSTOMER	BE COURTEOUS	BE FRIENDLY AND SMILE	DEAL WITH CUSTOMERS' COMPLAINTS COURTEOUSLY
	TACTFULLY EXPLAIN COMPANY POLICIES AND PROGRAMS				
POSSESS GOOD COMMUNICATION SKILLS	UNDERSTAND THE IMPORTANCE OF CUSTOMER SATISFACTION	SHOW ENTHUSIASM AND INTEREST	BE TACTFUL	DEAL WITH TELEPHONE CUSTOMERS PROFESSIONALLY	USE GOOD EYE CONTACT
	WORK WELL WITH ALL OTHER EMPLOYEES	WRITE LEGIBLY	EFFECTIVELY USE AN INTERCOM AND PUBLIC ADDRESS SYSTEM		
DEMONSTRATE PROFESSIONAL CHARACTERISTICS	DEMONSTRATE HONESTY AND INTEGRITY	DEMONSTRATE PRIDE IN HIS/HER WORK	BE RELIABLE/DEPENDABLE	ACCEPT RESPONSIBILITY AND MAKE GOOD DECISIONS	BE PRODUCTIVE
	BE PUNCTUAL	BE WELL GROOMED			
BE RECEPTIVE TO MANAGEMENT	FOLLOW COMPANY POLICIES	SHOW WILLINGNESS TO WORK	ACCEPT AND LEARN FROM CRITICISM	FOLLOW THROUGH/COMPLETE DUTIES WITH MINIMUM SUPERVISION	ASK QUESTIONS
	MAKE SUGGESTIONS				
POSSESS MERCHANDISING SKILLS	MAINTAIN STORE APPEARANCE AND SAFETY (e.g., DUST, SWEEP, MOP, ETC.)	MAINTAIN ATTRACTIVE DISPLAYS	DEMONSTRATE GOOD SALES TECHNIQUES	DEMONSTRATE PRODUCT KNOWLEDGE	ROTATE STOCK CORRECTLY
	MERCHANDISE RELATED ITEMS	UNDERSTAND INVENTORY CONTROL			
POSSESS BASIC MARKETING SKILLS	USE BASIC MATH	USE CORRECT MONEY-HANDLING PROCEDURES	BE FAMILIAR WITH ALL TYPES OF CASH REGISTERS	HAVE A BASIC UNDERSTANDING OF ADVERTISING POLICIES	POSSESS A BASIC KNOWLEDGE OF BOOKKEEPING
	UNDERSTAND BASIC PURCHASING AND RECEIVING POLICIES	POSSESS A BASIC UNDERSTANDING OF OPERATING COSTS			